

**A HISTORICAL, GEOGRAPHICAL AND ARCHAEOLOGICAL
SURVEY OF THE JORDAN VALLEY
IN THE LATE BRONZE AGE**

by

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submitted in accordance with the requirements

for the degree of

DOCTOR OF LITERATURE AND PHILOSOPHY

in the subject

BIBLICAL ARCHAEOLOGY

at the

UNIVERSITY OF SOUTH AFRICA

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AUGUST 2012

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I declare that:

A HISTORICAL, GEOGRAPHICAL AND
ARCHAEOLOGICAL SURVEY OF THE JORDAN VALLEY
IN THE LATE BRONZE AGE

is my own work and that all the sources that I have used or quoted have been
indicated and acknowledged by means of complete references.

SIGNATURE

DATE

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ABSTRACT

This thesis is a multi-disciplinary survey of the Central Jordan Valley during the Late Bronze Age (1500-1200 BC) illustrated with an abundant use of maps and tables. The purpose is to determine how the Jordan Valley functioned as an economic unit during the Late Bronze Age.

This thesis surveys the geographical, historical and archaeological records related to the Jordan Valley during the Late Bronze Age. A chapter is devoted to each field, geography (physical and human), history (Egyptian and Hebrew Bible) and archaeology. The data from each discipline is used to individually answer two questions:

- 1) was the Jordan Valley a single geographic/economic unit in the Late Bronze Age?
- 2) to what extent was the Jordan Valley integrated/interacting with the east-west highlands and the larger region in the Late Bronze Age?

The primary objectives are to 1) explore and model a historical geographic hermeneutic for understanding the human experience of the Ancient Near East; and 2) lay a foundation for understanding the role of the Jordan Valley in affecting the Biblical periods of the Israelite monarchy to the Roman period.

The answers from each chapter are then synthesized into a single geographic historical archaeological picture of the Central Jordan Valley during the Late Bronze Age. The Central Jordan Valley was divided into two sections: a fertile, populated, well connected north-central section and an isolated, sparsely populated southern section with limited agricultural zones. Trade with and between the eastern and western highlands is well represented by artifactual parallels in and through the Jordan Valley, the north-central section on a regional and international scale and the southern section on a more local scale. The thesis concludes that there are more artifactual points of connection between the Jordan Valley and the eastern highlands than with the western highlands. An 'early conquest' model of the Hebrew Bible is plausible within the historical records of the Egyptian 18th and 19th Dynasties and the geographical and archaeological records of the Jordan Valley during the Late Bronze Age.

Key words: Amarna Letters; 'Apiru; Central Jordan Valley; Chocolate-on-White ware; Climate of Jordan Valley; Early Conquest Model; Earthquakes in the Jordan Valley; Egypt in the Jordan Valley; Emergence of Israel; Geology of Jordan Valley; Hydrology of Jordan Valley; Israel in the Jordan Valley; Jordan River; Jordan River Floods; Joshua; Judges; Late Bronze Age; Maps of Jordan Valley; Plains of Moab; Rain

shadow of Jordan Valley; Shasu; Topography of Jordan Valley; Trade in the Late Bronze Age; 18th and 19th Dynasties.

ACKNOWLEDGMENTS

In completing a project of this magnitude, I must acknowledge and thank key individuals, who have enabled me to rise above my own abilities in conducting this research and succeeding in the submission of this thesis.

To be an Olympic marathoner, you must choose your parents well. My parents have given me the confidence to tackle the challenges of life and to achieve my dreams by nurturing a love for reading, exploration and adventure.

To Kathy, Michael, Sara and Kaitlyn who, after enduring many weekends of walking through the valleys and hills of Jordan looking at 'old rocks', not only sacrificed time and opportunities with their husband/father but picked up extra responsibilities to allow me to complete this work.

To Richard Hart whose creative encouragement and enthusiasm spurred me forward in investigating how the 'Great Rift' can actually bring us together.

To Edward Dawson who opened the wadis and hills of Jordan for me as an intrepid navigator and fellow explorer.

I am indebted to the faculty of Jerusalem University College (1997-2000), especially Wink Thompson, Jim Monson, Ginger Casseon and the late Anson Rainey who took extra time and effort to coach their commuter student from 'the other side.'

Professors Magdel Le Roux and Coenie Scheepers, my promoters at the University of South Africa, whose direction and leadership matured and guided this project to its submission.

To Barbara Shaw, I now understand why editors get so much attention from their writers. This thesis would not have been completed without your expertise, encouragement and deadlines.

With appreciation, I thank you all.

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CHAPTER 1: INTRODUCTION

1.1 HISTORY OF THE PROJECT

This thesis is an attempt to determine if the Jordan Valley of the Late Bronze Age was an integrated geographic/economic unit and to what extent the cities of the Jordan Valley were interacting with the neighboring east-west highlands and the larger region. The author's interest in the Jordan Valley and the Late Bronze Age began during a thirteen year residency in Amman, Jordan (1990-2004) punctuated by a variety of study and recreational trips into the valley and through the eastern and western highlands. Trained in a traditional literary/grammar hermeneutic in understanding the Bible, exposure to the hills and valleys with their natural routes and barriers connecting the numerous archaeological sites created an interest in developing complimentary skills in a historical geographical hermeneutic. In 1998, this researcher was challenged by the Jordanian Minister of Tourism to help promote 'Jesus in Jordan'.¹ According to the Gospels of Matthew, Mark, Luke and John, Jesus traversed numerous times through the eastern side of the Jordan in the Decapolis and the Roman district of Perea. The majority of the recorded words of Jesus (although not geographically bound) were spoken while he was east of the Jordan River. In trying to understand the political and culture implications of Jesus spending so much time east of the Jordan River, the study began to focus on understanding the Roman district of Perea that included a large part of the eastern side of the Central Jordan Valley. This was the closest point to Jerusalem outside of the jurisdiction of Judah and the furthest point from the seat of Roman rule in Damascus. Jewish authorities, calling for legal action against those baptizing and teaching 'across the river', would first need to appeal to the Roman power at Caesarea Maritima and then wait for the prefect of Judea to get a response from the

¹ The context of the request was at the beginning of several marketing campaigns endorsed by the Jordanian Ministry of Tourism to capitalize on the region's Christian pilgrim/tourist traffic in the run up to the millenium celebrations and the opening of the Maghtas site (a candidate for 'Bethany beyond the Jordan' where John was baptizing).

governor in Damascus before gaining permission to act. Where does one start in understanding the dynamics of a political entity whose boundaries are affected, not just by geography, economics and culture, but a long history of earlier socio-political divisions? An understanding of the social/political dynamics of the east side of the Jordan Valley required a study that went back through the Roman, Hellenistic, Persian, Babylonian, Assyrian and Iron Age periods whose local and regional kingdoms (sometimes dominated by world superpowers) all divided the Jordan Valley into different districts. The Late Bronze Age with its individual city-states transitioning to the rise of local kingdoms (Israel, Ammon, Moab and others) was a good place to start to understand whether the Jordan Valley was a single economic/political unit and to what extent it was integrated into the highlands.

The Central Jordan Valley also provides a well-defined geographic entity suitable for a historical and archaeological survey. It is separated from the larger north-south Dead Sea Transform (part of the Great Rift Valley) by the Sea of Galilee and the Dead Sea. With the exception of the 2-3 kilometer (1.2-1.8 miles) wide Harod Valley connecting to the coastal plain via the Jezreel Valley, the east-west boundaries are marked by a sharp escarpment rising into the highlands. The Central Jordan Valley is the most distinct geographical feature in the southern Levant. It sets the whole region on a north-south axis.

The Jordan Valley is a major obstacle to east-west interaction, separating the two main international highways connecting Egypt with the northern empires where the Mediterranean Sea and Eastern Desert force them to closely parallel one another. The Jordan Valley provides a micro environment of desert, swamp and fertile plains for a long record of human habitation. The confines of the Jordan Valley during the Late Bronze Age also provide a direct challenge to testing a historical geographic hermeneutic of some Biblical narratives by observing how they fit with the Egyptian historical documents and the archaeological records.

1.2 AIM AND OBJECTIVES OF THE THESIS

The aim or purpose of this thesis is to use a multi-disciplinary approach to determine how the Jordan Valley functioned as an economic unity in the Late Bronze Age

(1500-1200 BC). To accomplish this aim, the geographic, historic and archaeological data on the Jordan Valley during the Late Bronze Age are investigated with the following two research questions in mind:

1. Was the Jordan Valley a single geographic/economic unit in the Late Bronze Age?
2. To what extent was the Jordan Valley integrated/interacting with the east-west highlands and the larger region in the Late Bronze Age?

One objective in the multi-disciplinary approach (geography, history and archaeology) in conducting this research is to raise the value of critically utilizing geography, extra-Biblical sources and archaeology for the Bible student who is often looking at these alternate sources for simple proof-texting and for the archaeology student to value the historical record (particularly the Bible) as a beneficial resource for his/her enquiry. The multi-disciplinary approach to both questions will model a historical geographic hermeneutic for exploring ancient near eastern history that this thesis hopes to encourage.

A second objective is to understand how the Jordan Valley functions as an economic entity without a superimposed kingdom-state or foreign empire enforcing political boundaries. Answering these two research questions will provide a foundational starting point for understanding the Jordan Valley's role and influence in the more complicated political environment of the rising local/regional kingdoms of the Iron Age and the Egyptian and Mesopotamian empires' desire to assert control over the southern Levant throughout the Iron Age, Assyrian, Babylonian, Persian, Hellenistic and Roman periods.

A third, but secondary objective, will be to examine the Hebrew Bible narratives of Numbers, Joshua, Judges, Ruth and parts of I Samuel within a Late Bronze Age dating scheme. The Hebrew Bible narratives (Numbers through I Samuel) are examined for economic, political and cultural elements relating to the Jordan Valley to compliment what otherwise would be a purely Egyptian history of the Jordan Valley in the Late Bronze Age. The broad survey of material in this research provides a unique

opportunity to examine these narratives for points of allowance or conflict between the Hebrew Bible and the Egyptian historical records of the 18th and 19th Dynasties as well the geographic and archaeological data of the period.

1.3 METHODOLOGY

1.3.1 Multi-disciplinary approach: A historical geographic hermeneutic

A multi-disciplinary approach in the fields of geography, history and archaeology is used in examining the two research questions. Each of these three disciplines have become more and more specialized in the recent decades with the result that practitioners in each field are focused on minute details, methodologies and the technology of their chosen subject. Without 'cross-disciplinary pollination', each field is limited to its own practices. An archaeologist can specialize in the geomorphic analysis of ceramic materials to the microscopic layer. When that archaeologist partners with a geologist who has analysed and catalogued the composition and location of clay deposits, the origin of the ceramic material can often be identified to a very specific region or local location. The archaeologist and geologist can conclude the 'what' of the physical and technological connection between the two points but when they consult the historical records, they can often find out the 'who' and 'why' that existed between the two points. A cross disciplinary approach does not always answer the questions asked and it often brings even more debate. An archaeologist will argue that there is no evidence of a Late Bronze Age city or town (conceding only the possibility of a small settlement) at the site of modern day Jerusalem. This is what the lack of evidence to their methodology concludes. The historian will argue from the methodology of the discipline of history (applied to examining Amarna Letter 285; section 3.2.1.9.4) that a large settlement most certainly existed, functioning as a regional seat of government with a palace, governor's residence and barracks for a garrison of Egyptian soldiers.

The debate and challenges between the two disciplines is healthy and positive if it is a catalyst for further research. The analysis and comparison across the disciplines allows a broader 'fuller picture' of understanding the human experience. The field of geography includes the use of both the physical and human geographical record and,

when combined with history, incorporates the study of historical texts, their contents and language. The focus is on the primary texts but includes studying other post-primary ancient texts.² Other fields such as toponymy (the study of place names) quickly multiply and cross from the historical record into the fields of geography and archaeology (cf. Rasmussen 2010:254-262). A multi-disciplinary approach provides the broadest insight into the human experience.

1.3.2 Qualitative research methods

The majority of this study utilizes qualitative research methodology with a limited use of qualitative methods (primarily focused on participant observation in field work). The qualitative method is based on a historical approach which attempts to follow the six steps of research listed by Harter and Busha (1980:93):

1. Recognize a historical problem or identify the need for certain historical knowledge (i.e. What role did the Jordan Valley play in the economy of the Levant of the Late Bronze Age? Was it a barrier to international trade? Did it separate the eastern and western highlands economically or politically?).
2. Gather as much relevant information about the problem or topic as possible.
3. If appropriate, form hypotheses that tentatively explain relationships between the historical factors (i.e. the application of a historical geographic hermeneutic will show that the Jordan Valley functioned as a single economic unit highly integrated into the surrounding regions, operating as gate way between Egypt and the Mesopotamian powers).
4. Carry out a rigorous collection and organization of evidence, and verify the authenticity and veracity of information and its source (i.e. Chapter 2, physical and human geography of the Jordan Valley; Chapter 3, the Egyptian and Biblical accounts dealing with the Jordan Valley; Chapter 4, the archaeological record).

² A clear example of a post-primary ancient text important to the historical geographer in the southern Levant is Eusebius' *Onomasticon*. Written in the third century AD, it is filled with key geographic information of the Roman and Hellenistic sites of the region, often relating to sites mentioned in the Biblical record.

5. Select, organize and analyze the most pertinent collected evidence, and draw conclusions.
6. Record the conclusions in a meaningful narrative.

This study primarily uses the grounded theory. The grounded theory is an inductive study, based or 'grounded' in the observations and data listed in the historical documents and literary reviews of excavation reports. The data from the literary review is categorized into patterns of unity and connectedness in order to organize and report the results (cf. Marshall & Rossman 2006). This inductive study of the literary material is complemented by personal observation and experience of driving and walking in the Jordan Valley and its many wadis and by conducting semi-structured interviews.

In utilizing the Grounded Theory in this historical research, three primary principles emphasized by Harter and Busha (1980) are maintained:

1. That the information in the sources and the information possessed/used by the writers of the sources may be slanted or biased;
2. That quantitative facts may also be biased in the types of statistical data collected or in how that information was interpreted by the researcher;
3. That evidence should not be examined from a singular point of view (cf. Harter & Busha 1980:99-100).

The quantitative methods used in this research are primarily limited to participant observation. Although the analysis of published data bases and the mapping of listed sites to determine settlement patterns on the Jordan Valley and potential routes into the highlands were utilized in a limited amount. The only real quantitative elements of this research come from the author's 13 year residency (1991-2004) in Amman, Jordan. During this time numerous field trips into the Jordan Valley and the adjoining highlands were undertaken to examine the various archaeological sites, geological formations and their geographic relationships. Photographs, measurements and general impressions were recorded in a personal journal. These observations were reviewed for this study and contribute to the potential routes and travel times within this research.

Applying these methods of research to the two research questions allows for a greater understanding of the underlying economic trends and forces of the Jordan Valley as well as the valley's effects on the larger region before kingdom-states and occupying empires superimposed political boundaries and policies across the region. These political boundaries and accompanying policies affect the Biblical periods of the Israelite monarchy and the life of Christ. The Late Bronze Age saw the beginning of the political transition of the Jordan Valley from city-state to emerging kingdoms and thus provides a good starting point for applying a historical geographic method to understand how the valley functioned as a geographic economy before these political divisions occurred.

1.4 THE STRUCTURE OF THE THESIS

In support of the multi-disciplinary method of a historical geographic hermeneutic, the structure of this thesis is made up of five chapters:

- Chapter 1: Introduction
- Chapter 2: Geography of the Jordan Valley
Geography of the Jordan Valley explores both the physical and human geography of the valley. Physical geography covers the topics relating to the surface of the earth. This includes the landforms, rocks and soil, flora and fauna, hydrology and climate. Human geography covers the topics relating to human interaction with the environment. This includes settlements, economic activity and transportation routes.
- Chapter 3: History of the Jordan Valley
The history of the Jordan Valley reviews the Egyptian records and the narrative of Numbers, Joshua, Judges, Ruth and I Samuel of the Hebrew Bible that involve the Jordan Valley.
- Chapter 4: Archaeology of the Jordan Valley
The archaeology of the Jordan Valley reviews a number of preliminary and final excavation reports for the Jordan Valley and neighboring highlands. The key sites reviewed in the Jordan Valley with published material are Beth-

shan/Tell Husn, Tell Sarem/Rehob, Tbaqat Fahl/Pell, Abu Kharaz, Tell Hayyat, Tell Kittan, Tell Ubeidiya, Kfar Rupin, Deir 'Alla, Tell Hammeh, Kateret Samra, Tell Mazar, Tell Sa'idiyeh, Jericho, Tell Hammam, Tell Kafrein, Tell Iktanu and Tell Nimrin. A select number of sites in both the eastern and western highlands are also reviewed. These are listed in the table of contents of Chapter 4.

- Chapter 5: Conclusion

The conclusion' synthesizes the data from the geography, history and archaeological chapters into a final summary. Implications for current and future research surrounding the Jordan Valley, the emergence of Israel and a historical geographic hermeneutic, are discussed.

1.5 LITERARY REVIEW

In researching each field of geography, history and archaeology, a large number of sources were reviewed. Each is cited appropriately within the text. In the following sub sections only the core resources that formed the foundation of each chapter are discussed.

1.5.1 Geography of the Jordan Valley

In the geographical research, a number of atlases, map sheets from the Royal Jordanian Geographical Society and Google Earth were used. The author's personal experience of driving and walking throughout the Jordan Valley and the east-west highlands (especially on the Jordanian side) for impression of topography and routes is extensively relied upon. Other foundational material used to gain an understanding of the geography are: *The Holy Land Satellite Atlas* Volumes 1 & 2 (Cleave 1999), *The Student Map Manual: Historical Geography of the Bible Lands* (1979) and its historical exercises and map marking guide, *The Land Between* (Monson 1983) and *Regions on the run* and *Geobasics in the land of the Bible* (Monson 1998; 2008). The *Holy Land Satellite Atlas* Volumes 1 & 2 and *The Land Between* have no specific citation in the following chapters but were invaluable in

providing a foundational understanding of the land. The other mentioned sources contributed to a degree far greater than the number of their citations referenced.

1.5.1.1 Data bases

Modern politics has divided the Jordan Valley into three political entities: Israel, the West Bank and Jordan. As a result, there is not one comprehensive database on the sites of the Jordan Valley. This thesis attempts to compile a comprehensive list of Late Bronze Age sites identified through numerous surveys and excavations across the three political entities. The following data bases and surveys were consulted:

Data bases for Jordan:

- *The Jordan Antiquities Database & Information System (JADIS)* published in 1994 with Palumbo as editor (Palumbo 1994). This database was kept relatively up to date until it was incorporated and made mostly redundant by MEGA-Jordan. The full JADIS database, outside of the 1994 publication, is difficult to access as points of entry are limited to the computer systems at the Department of Antiquities in Amman and the American Center of Oriental Research in Amman.
- *MEGA-Jordan* (Middle Eastern Geodatabase for Antiquities) by The Getty Conservation Institute and the Jordan Department of Antiquities which incorporates and updates JADIS into a larger geographic information database with interactive map overlays (<http://www.megajordan.org/Map>).

Data base for the West Bank:

- *The West Bank and East Jerusalem Archaeological Database Project*. The content is based on The Israeli-Palestinian Archaeology Working Group which gathered details about each site in the West Bank that was excavated or surveyed from 1967 to 2007. This data includes the site name(s), location on a GIS grid, description of the sites' major components, details about the periods when the sites were occupied, information about the excavators or surveyors who gathered data about the sites and relevant

publications/bibliography. The database was published in 2009 (Greenberg 2009) and is also available on the internet as 'The West Bank and East Jerusalem Searchable Map by the University of Southern California Digital Library' (<http://digitallibrary.usc.edu/wbarc/>).

Data base for Israel:

- The Israel Antiquities Authority's publication *Excavations and Surveys, containing preliminary reports of excavations and surveys in Israel, as well as final reports of small-scale excavations and surveys*. This is also available on the web with an interactive archaeological map and Google Earth overlays (http://www.hadashot-esi.org.il/index_eng.asp).

Data bases for the Region:

- *The Digital Archaeological Atlas of the Holy Land (DAAHL)* is a comprehensive spatially referenced database of current archaeological knowledge of all periods of the Levant. One unique function of this site is the ability to view the Palestine Exploration Fund maps as overlays to the topographical and satellite imagery (using Google Earth), allowing direct comparison of sites and roads of the late 19th and 20th centuries. The site is comprehensive but still a work in progress, powered by a consortium of over 30 professional archaeologists (<http://daahl.ucsd.edu/DAAHL/DaahlProjectsLister.php>).
- USC Archaeological Data Files: The University of Southern California Data Files project is a simple straightforward database in Excel format including alternative site names, numbers, bibliographic information, major and minor occupation periods, site components and excavator/excavation details (<http://www.alt-arch.org/westbank.php>).

This thesis also refers to a number of individual surveys and site reports which were consulted at source. Many of the surveys for the Israeli side were handled second hand through the larger databases. The primary surveys reviewed for the Jordan Valley and neighboring regions are:

- *The Jordan Valley Survey, 1953:*
Melleart and De Contenson surveyed more than 100 sites in the Yarmuk and Jordan Valleys. Brief soundings were conducted at seven sites. Melleart and De Contenson never fully published the survey but published brief notes, which they did separately (Melleart 1962; De Contenson 1964).
- *Wadi Ziqlab Project:*
Since 1987, the Wadi Ziqlab Project, directed by Banning of the University of Toronto, has conducted archaeological surveys and excavations of Epipalaeolithic, Neolithic, Chalcolithic, and Early Bronze Age sites in northern Jordan, following an initial survey in 1981 and test excavations in 1986 (Banning [1989] and <http://homes.chass.utoronto.ca/~banning/Ziqlab/>).
- *The Lower Wadi Hammeh Survey:*
Wadi Hammeh is located 2 kilometers north of Tabaqat Fahl/Pella. The survey is directed by P. Edwards (1986).
- *The East Jordan Valley Survey 1975:*
The EJVS completed a survey of the eastern side of the valley in two seasons, 1975 and 1976 (Ibrahim 1976; Ibrahim, Sauer & Yassine 1988).
- *The Wadi Yabis Survey:*
This survey covers approximately 190 square kilometers including the entire Wadi Yabis, north of Ajlun. The intensive survey of the Wadi Yabis basin has led to the discovery of almost 250 archaeological sites from Lower Palaeolithic to Ottoman times (Mabry 1988; Palumbo 1990a; 1990b; 1992).
- *Zerqa Triangle Survey:*
The Zerqa Triangle Survey is part of a larger study published in *Life on the watershed: Reconstructing subsistence in a steppe region using archaeological survey: A diachronic perspective on habitation in the Jordan Valley* (Kaptijn 2009). The survey encompasses the Wadi Rujib and Jabbok River alluvial plain down to the Zor.
- *Judea, Samaria, and the Golan:*
Judea, Samaria and the Golan: Archaeological Survey 1967-1968 by Kochavi, Bar-Adon, Epstein and Gophnawas published in 1972. It is in Hebrew but many English sources quote it.

- Beth-shan Valley Archaeological Project:
The Institute of Archaeology of the Hebrew University of Jerusalem directed by A. Mazar has been working in the Beth-shan Valley since 1989. The study includes a survey of the Beth-shan Valley, nine seasons of excavations at Tell Beth-Shan and the excavations at Tell Rehob/Sarum since 1997.
<http://archaeology.huji.ac.il/depart/biblical/amihaime/bethshean.asp> and
<http://www.rehov.org/Rehov/index.htm>
- The Manasseh Hill Country Survey:
This survey, led by Zertal, has been covering the 400 square kilometers of the central hill country of Israel/Palestine since 1978. It includes parts of the Beth-shan/Harod Valleys and the Samaritan Hills bordering the Jordan Valley. Volume 2, *The Eastern Valleys and Fringes of the Desert* (2008) includes parts of the Beth-shan/Harod Valleys and the Samaritan Hills bordering the Jordan Valley and the Wilderness.

These databases were also checked and supplemented with sites listed in Dorsey's two works, *The roads and highways of Israel during the Iron Age* (1981) and *The roads and highways of ancient Israel* (1991) which cite material not readily available to this author due to language or lack of publication. Although Dorsey's study was focused on the Iron Age, he references Late Bronze Age occupation at many relevant sites which he culled from the volumes of *Hadashot Archaeologiat*, the entries in *Yalqut Hapirsuim* and from Na'aman's and Porat's unpublished surveys on Manasseh and Samaria (Dorsey 1981:170-172).

1.5.1.2 Map source and Orientation

Starting in Chapter 2 and going through to the conclusion, the geographical, historical and archaeological data is illustrated on a variety of maps. All the maps in this thesis use Map 4-2 from the Student Map Manual (SMM 1979: 4-2) as a base. Map 4-2 was digitally manipulated by removing the publisher's markings and varying the shading to highlight the Jordan and Jezreel Valleys. Overlays for the individual illustrations were then added.

Google Earth (<http://www.google.com/earth/index.html>) was used extensively in this investigation. The many features of Google Earth (historical map overlays, measurements, 3-D imagery, changing viewpoints on three axes, linking photographs and text to the maps, marking waypoints and conducting 'fly-throughs' at various angles on a topographical 3-D format) as well as drawing many of my own polygons to construct various models and measurements, formed a core tool in this research. *Google Earth* is becoming popular not only for the geographer but the historian and the archaeologist as well. It would behoove any student in these disciplines to become familiar with this tool. Unless otherwise indicated, the various measurements, elevations, distances, precipitation and topographical lines used in this thesis are from one or more of the following: *Google Earth*, *Regions on the run: Introductory map studies in the land of the Bible* (Monson 1998), *Geobasics in the land of the Bible* (Monson & Lancaster 2008), *Israel, The New Road Atlas* (1996) and *The Hashemite Kingdom of Jordan (Archaeological Map)* (1978). These sources have not been cited individually in each table and figure in order to make the tables and figures more accessible.

All maps in this thesis (except those specifically marked) are eastern oriented (east is at the top of the map and the Mediterranean Sea at the bottom). This orientation is chosen for the following reasons:

1. The ancient world was oriented to the east (the rising sun) and early maps are also oriented in this direction (i.e. the Madaba map of the 4th century AD).
2. The eastern orientation emphasizes the physical barrier that the Jordan Valley and the eastern desert presented in the exchanges between Egypt and the Tigris/Euphrates civilizations, highlighting the importance of the coastal and Trans-Jordan north-south highways.
3. Practically, it is easier to view and work on a large scale map of the Jordan Valley with an eastern orientation.

1.5.2 The History of the Jordan Valley

1.5.2.1 Primary sources

Historical information for this study comes from three main sources: epigraphic texts, archaeological sources and the Bible. The Bible is not considered an epigraphic text for the Late Bronze Age as the relevant sections cannot be dated by established palaeographic criteria to determine with accuracy that they were written during the period of the Late Bronze Age. The Hebrew Bible's books of Numbers, Deuteronomy, Joshua, Judges and Ruth will be treated as literary-historical compositions of events which have gone through various editors and/or copyists after the period of the events described, but still provide relevant details with the context of their storylines (see 1.5.2.1.2). Chapter 3 focuses on the historical accounts recorded in the Egyptian and Biblical records.

As stated in section 1.3.2, the Grounded Theory (Harter & Busha 1980) is utilized in examining the historical (literary) record. In dealing with both the Egyptian and Hebrew Bible literary records, a historical-critical maximum approach is applied in searching for political, economic and social details related to the Jordan Valley.

1.5.2.1.1 The Egyptian sources

The epigraphic documents which provide a history for Canaan are classified into three groups according to their country of origin: Egyptian, Mesopotamian and Palestinian. The Mesopotamian documents make only vague references to the geography of this study. The first clear mentions of Palestinian cities are from the royal archives in Mari on the Euphrates from the eighteenth century B.C. These archives briefly mention Hazor and Laish (ANET:482). Before the first millennium, there are only vague references to Palestine and Syria (Amurru), the Sea of Amurru (the Mediterranean), the Lebanese mountains and perhaps Bashan (Aharoni 1979:96). The various Mesopotamian powers were aware of the geography and economics of the southern Levant and the Jordan Valley for there were detailed exchanges between Egypt and the northern powers over issues affecting this region. But at this age of development, only the Egyptian side of the exchange is known. The true Palestinian inscriptions (from Deir 'Alla or the cuneiform tablets from Pella and

Jericho) are either in an unknown script or are too eroded to decipher (see 3.4; 4.2.2.1; 4.2.1.3; 4.2.3.1). All the other inscriptions from Palestine are written by or for the Egyptians and included in the Egyptian epigraphic material reviewed.

The Egyptian sources from the Late Bronze Age span the 18th and 19th dynasties of the New Kingdom. These sources fall into several well established genres which are described below. All but a few of the literary papyri such as the satirical letter of Papyrus Anastasi I are official administrative or propaganda texts. Although some of the administrative correspondence such as the Amarna letters can be direct and defensive, they still support Egyptian policy and uphold the Pharaoh as supreme. Even the private biographical texts from tomb inscriptions are glorifying the works of service for and by the Pharaoh. Outside of the Biblical accounts, the written story of the Jordan Valley during the Late Bronze Age is an Egyptian story.

The Egyptian sources used in this Chapter with modern translations fall into the following categories:

- Annals and expedition journals:

These are yearly records of major events and data that were considered necessary for future generations. Usually these are military campaigns preserved as official inscriptions carved on temple walls and/or stelae (i.e. the annals recorded on pylon six and seven at the temple in Karnak provide several narrations of Thutmose III's seventeen campaigns in the Levant [see 3.3.1.4]).

- Bas Reliefs:

Egypt adorned many of its temples and monuments with sunken-relief sculptures. Many of these reliefs depict details of warfare and everyday life but are poor in topographical information. A few examples, such as those of Seti I and Ramesses II, portray many towns and fortresses in Canaan (see 3.2.2.1).

- Topographical Lists:

Many Pharaohs of the New Kingdom complemented their annals with a list of captured people or towns, carved in oval rings containing the names of the towns inside and a partial figure of the local ruler. These lists provide details of key military points in military campaigns. The foreign toponyms of captives and their cities were used as propaganda announcements of the Pharaohs' victories. There is much scholarly debate on whether the lists represent a specific marching order or simply convenient or familiar groupings³ (i.e. Seti I's topographical list on his Karnak relief lists 17 cities visited by Seti I on his first campaign [see 3.2.2.2.1]).

- Correspondences:

The epigraphic sources in this type of genre are primarily international diplomatic or administrative correspondence. The Taanach and Amarna tablets written in Akkadian are prime examples of this genre, indicating that Akkadian was the international and diplomatic language of the time (see 3.2.1.7 and 3.2.1.9).

- Private biographical statements:

Oftentimes high ranking military leaders had personal records on their tomb inscriptions recounting the official's or military officer's exploits (i.e. the tomb inscription of an Egyptian military officer named Ah-mose, the son of the woman Ebana located in tomb five at el-Kab gives his biography in the service of Pharaoh [see 3.2.1.1]).

- Literary and administrative papyri:

From the time of the New Kingdom, there are a few administrative papyri giving details about grain shipments and rations or reports from military outposts. Some of the literary papyri contain descriptions of Palestine that

³ Aharoni's disagreement with Noth over Thutmose III's topographical lists, representing a marching order in southern Canaan is a prime example of scholars arguing both sides of this debate (Aharoni 1979:157).

are sarcastic or have other literary genre details that provide insights different from official versions. The account of Hori, a satirical scribe/charioteer challenging a young scribe's knowledge and capability of navigating the Levant of Papyrus Anastasi I, is a prime example of this genre (see 3.2.2.4).

1.5.2.1.2 The Hebrew Bible

All Bible references are from the *New American Standard Bible* (1995).

When using the Bible as a historical document, one must acknowledge that it is primarily *Heilsgeschichte*⁴ and not *Historie*. 'The problem for the historiographer, then, is the selective nature of the Old Testament. It is not primarily a history in the chronicling, political sense of the term, but a descriptive, tendentious account of God's work in human affairs' (Merrill 1987:17). The Old Testament writers wrote a selective history rather than a social or political history, primarily for theological reasons. The selectivity of the Biblical record is obvious in the books of Numbers, Joshua, Judges and into I Samuel. Regardless of the exact dating, in the writings describing the emergence of the Hebrews onto the eastern highlands, their entrance into Canaan and growth into a United Kingdom, one would expect to find some reference to Egypt in a general history of Canaan for these periods. Outside of the many past tense references to being delivered from Egypt in the accounts of Joshua through Samuel, there are only two present tense references to Egyptians in the southern Levant close to the Late Bronze Age time period. These are from David's early life (II Samuel 23:20-21; 30:11-20).

These Biblical narratives of Numbers, Joshua, Judges and Ruth are the only direct historical (literary) source of information for the proto-Israelites and therefore must be used with great circumspection as any single source account. Even though these accounts may have been written long after the events portrayed, they still contain

⁴ *Heilsgeschichte* is German for 'salvation history'. This is a term employed by the Biblical Theology movement to describe the story of the Bible as that of God's redemptive work in the events of history (Browning 1997, s.v. 'Heilsgeschichte').

elements of the earlier conditions reflected in their accounts. With caution and awareness of the Hebrew Bible's primarily *Heilsgeschichte* purpose, the narratives are examined for political, economic and social elements in a position similar to Finkelstein who states, "Thus it seems that even if the Biblical text was set down in writing long after the events it describes, it must have been based on a substantial body of accurately preserved memories' (Finkelstein & Silberman 2001:15).

The history of Israel surely involved more than the Biblical record states. The Biblical authors make reference to some of their source material such as the Book of Jashar (Joshua. 10:12, 13 and 2 Samuel. 1:18–27) which must have contained further details from the time period but have not survived through history. However, the historian can only work with the material preserved and therefore, for the purpose of this study, the Biblical record is treated as an ancient document with possible references to political, social and economic aspects related to the Jordan Valley. A historical-critical maximum approach is applied in searching for political, economic and social details related to the Jordan Valley (see 1.9 for comments regarding other approaches to the use of the Hebrew Bible as history). With regard to premonarchic Israel, the Bible is the only source of literary information (Hayes 1987:5-9). This is especially true for the time period in which the narratives in the books of Numbers, Joshua, Judges and Ruth are set. There are only two known extra-Biblical references to Israel, the Merneptah stele and the Berlin fragment (see 3.2.2.5). Dismissing the Biblical account, due to the fact that its primary purpose is redemptive, significantly and unnecessarily reduces the amount of information available for the southern Levant and removes any reference point or historical control for literary study (Ulrich 1999:57). Using the selective or propaganda history argument to dismiss the Bible as a source would also require this thesis to exclude much of the Egyptian corpus, which clearly records/writes history with the purpose of glorifying and raising the status of the Pharaoh.

The issue of whether or not the examined Biblical accounts were authored during the Late Bronze Age (see 1.8) is not addressed in this research. Some portions are clearly authored or edited during the period of the monarchy of Israel or even later. Irrespective of whether the historical literature of the Old Testament was drafted

and written down just before the Exile, during the Exile or in the post-exilic period, there is reason to believe that various sections belong to an earlier phase of the history of ancient Israelite literature (Lemche 1991:94).

There are a myriad of dating suggestions for the early books of history in the Bible, the study of which is a legitimate and worthwhile pursuit. Without the original epigraphic documents, irrespective of one's scholarly tradition, early or late dates cannot actually be proved or disproved (Lemche 1991:94). The book of Judges, for instance, contains several examples of the issue of dating. The numerous citations of 'in those days Israel had no king' (Judges 17:6; 18:1; 19:1; 21:25) clearly leads one to believe that the book was written, or at least edited, in a later period when Israel had a king. Some portions of Judges, such as Judges 5 (Deborah's poem) are written in an archaic Hebrew compared to Judges 4 which gives a history of Deborah in a literary form in line with the rest of the book.

There is no clear evidence as to when the Biblical accounts were first written down, nor to the number of generations of copies there were before arriving at the manuscripts that are known today. This thesis uses the Biblical accounts as an ancient source, written at least within several centuries of the various events, using other contemporary written and oral sources, preserved through copyist with the writers'/editors' intended *Heilsgeschichte*. The assumption is that the material preserved in the narrative texts of the Hebrew Bible reflects the various authors' intent for the storyline. The political, economic and social details of the narrative(s) relating to the time period of the story is beneficial for the modern reader in order to gain insights into the place and events described. Unless literary genre and methods suggest otherwise, a *prima facie* in the historical-critical maximum tradition will be applied in searching for political, economic and social details related to the Jordan Valley.

Some scholars such as Dever argue that the Joshua-Judges narrative cannot be harmonized or used for history (Dever 2001:21-22). Although Dever's position is widespread, it is not universal. A running historical narrative is consistently represented in scholarship (Kaufmann, Waltke, Ulrich, Kitchen and Merrill). In this

study, a running narrative of the Hebrew people from Numbers through Ruth is assumed to contain relevant information regarding the economic, political and social conditions in the Jordan Valley during the Late Bronze Age. Since Chapter 3 deals with the literary record, the focus is a straight forward (*prima facie*) reading of the Biblical story-line. The author acknowledges that there are many schools of higher criticism challenging the dates and historicity of the contents of the storyline, especially surrounding the emergence of Israel (see 1.9 Limitations and assumptions of the study). The conclusion in Chapter 5 will seek to compare the archaeological record with this history record to see how the two fields complement or contrast in answering the questions of this thesis. Within Chapter 3, the Egyptian and Biblical records will be compared to see whether their activities or timelines in the Jordan Valley coincide.

1.5.2.1.3 Assumptions in placing the Biblical narratives within the Late Bronze Age

This research is focused on the Late Bronze Age. Once the decision to examine the Hebrew Bible for political, cultural and economic elements was made, a further decision on which parts of the Biblical storyline to consider relevant to a Late Bronze Age context had to follow. Chapter 3 handles the Hebrew Bible as a literary record telling the history of the Hebrew people. The Exodus, conquest, tribal allotments of the land and period of the judges are all tightly linked forming a running narrative across the individual books. But any evidence for specific dating of these events remains inconclusive. Even amongst the scholars that hold to the historicity of the Joshua/Judges account, there is disagreement on dates to place the events of the narrative. The different schools fall within two broad categories: the early school which dates the conquest beginning in the last half of the 15th century BC (Keil & Delitzsch 1970; Bimson 1981; Waltke 1990⁵) and the late school which holds to a 13th century BC date, no later than Pharaoh Merneptah's reign of 1213-1203 BC.

⁵ Other scholars who ascribe to this position are: J. Jack, J. Garstang, M. Unger, G. Archer, L. Wood, S. Horn and W. Shea.

Representatives of a 'Late conquest' school are W. F. Albright, Ernst Wright, John Bright, Paul Lapp, H. Kitchen and Y. Yadin amongst others.

Both schools base their dating on I Kings 6:1, 'In the four hundred and eightieth year after the Israelites had come out of Egypt, in the fourth year of Solomon's reign over Israel, in the month of Ziv, the second month, he began to build the temple of the LORD' and Judges 11:26, 'For three hundred years Israel occupied Heshbon, Aroer, the surrounding settlements and all the towns along the Arnon. Why didn't you retake them during that time?' The early school takes the year references in these two verses literally. The late school generally takes the number of years in I Kings symbolically in various forms, and the years listed in Judges 11:26 as an exaggeration in negotiation, while emphasizing the problematic references to the storage cities of Pithom and Ramesses in Exodus 1:11 to arrive at the second half of the 13th century date (Block 1999:25-26; Howard 1993:63-64).

Both early and late schools call for an overlapping of some of the judges' rulings in different locales. The internal chronological references in the Book of Judges must be compressed with some overlapping of individual judges to fit either the early or the late date schools. The *prima facie* reading of the text better suits the earlier chronology than the later. The late school requires a drastic compression of the judges' period from 450 to 150 years for which the text gives little allowance (Gaebelein 1992:376). The early school, with the overlapping of some of the minor judges, but not the major judges, fits much closer to the internal chronology of the text. 'In fact, they fit so much better that some think that the reference to 300 years in Judges 11:26 was secondarily fabricated and interpolated into the text to match the other chronological notices' for the early chronology (Waltke 1990:190). Allowing for overlapping of the minor judges, the major judges who ruled 'over all Israel' 'cannot be compressed into a period of some 150 years within the narrative of the story line' (Nichol 1957:24-25).

The majority of scholars, represented by Rainey and Notley (2006:168), Dever (2001:159), Mazar (1990:403) and others, date the Israelite United Monarchy to the first half of the 10th century BC with the split of the kingdom occurring around 931-

30. This date is based on cross over dates with Egyptian records of Pharaoh Shishak's campaign against Israel in the fifth year of King Rehoboam's reign (I Kings 14:25-26; *Epigraphic Survey 1954: Southwest wall of the Karnak Temple*) and other cross over dates from the annals of the Assyrian King Shalmenesar III's mention of the Israelite Kings Ahab and Jehu (Thiele 1965:53-90).

The early date school usually avoids the argument for rounded, averaged, generational or royal numbers and simply takes the listed years at face value. However, the issue of individual 'minor' judges ruling in different regions during the same time period remains a 'wild card' in laying out a strict chronology. The judge Jephthah's negotiations with the Amorites in Judges 11:15, 21-25 (see 3.3.5.6) gives a second internal dating point of three hundred years between Israel's conquest of Moab (Numbers 21:26) and the Ammonite attack on Gilead:

While Israel lived in Heshbon and its villages, and in Aroer and its villages, and in all the cities that are on the banks of the Arnon, three hundred years, why did you not recover them within that time? (Judges 11:26).

The storyline can then continue to march backwards three hundred years from Jephthah to the conquest. As all but four of the judges preceded Jephthah, a general time frame of the generations from the conquest to Jephthah is three hundred years. Using I Kings 6:1's four hundred eighty years, there was roughly one hundred forty years between Jephthah and the temple foundation (480 minus 40 for the wilderness wandering minus Jephthah's 300 equals 140). This places Jephthah's judgeship around 1100 BC and the conquest as beginning around 1400 BC.

Two other internal pegs for dating the Judges narrative are also used by the early date school: 1) Judges 1:21 reference to the Jebusites as present 'to this day' is associated with 2 Samuel 4:3-11's account of David dispossessing the Jebusites from their territory, and 2) the reference in Judges 18:31 to placing the Ark of the Covenant in Shiloh, which happened in the time of Samuel (1 Samuel 4:3-11). Both these references anchor the ending of the running storyline from Israel's conquest to monarchy before David's capture of Jerusalem.

This brief and perhaps overly simplified reasoning for including the Biblical accounts of Numbers through Judges and Ruth will certainly bring some argument from those who question the use of these Biblical accounts as history or placing the events recorded to such an early date. This author is aware of the critical works of Moore, Fritz (on Joshua) and Hertzberg (on Judges) that negate the use of these narratives as history. The works of these authors, as well as Fohrer, Eissfeldt and Gottwald, must be considered when debating the argument of using the Bible as history.⁶ This thesis avoids this debate and simply begins with the assumption that the Hebrew Bible contains historical material relevant to the narrative's intent and this researcher's investigation. Section 1.9 (Limitations and assumptions of the study) explains the author's awareness of the various positions critical of a historical maximalist approach to the Hebrew Bible and why alternative theories, as in the emergence of Israel (i.e. peasant revolt or peaceful/gradual infiltration) are not discussed in this paper. Returning to the reasoning of including the Joshua/Judges accounts into this study according to the 'early school' (Keil & Delitzsch 1970; Bimson 1981; Waltke 1990), a simple pragmatic answer, beyond comparing the two arguments, rests on the 'late school' compression of Judges placing the narrative clearly in the 12 century BC, in the Iron Age. Only the Joshua/Judges 1 and 2 conquest model(s) would fall at the Late Bronze Age/Iron Age transition. Therefore, if these Biblical narratives are to be examined at all in this study, an early conquest and Judges era must be assumed. Model chronologies of 'early' or 'late' conquest and the implications for which parts of the Biblical narratives to include in the Late Bronze Age, are covered in section 3.3.2, Figures 3.19 and 20.

1.5.3 Archaeology

The archaeology chapter reviews a number of individual preliminary and final excavation reports and specific studies for the Jordan Valley and neighboring highlands. These reports come from a variety of publications ranging from journals, newsletters, museum monographs, webpages and books. These are cited under the

⁶ Other scholars who argue for limited or no use of the Hebrew Bible as history are Miller, Hayes, Bright, Herrmann, Gottwald, Dever, Lemche, Finkelstein and Silberman.

appropriate site in the archaeology chapter. The core archaeological references consulted for a general overview of the period were: *The Sacred Bridge* (Rainey & Notley 2006), *The land of the Bible: A historical geography* (Aharoni 1979), *The origin of early Israel – current debate: Biblical, historical and archaeological perspectives* (Ahituv & Oren 1998), *Ancient pottery of the Holy Land: From its beginnings in the Neolithic Period to the end of the Iron Age* (Amiran 1969), *Who were the early Israelites and where did they come from?* (Dever, W.G. 2003), *The archaeology of the Transjordan in the Bronze and Iron Ages* (Dornemann 1983), *The Bible unearthed: Archaeology's new vision of Ancient Israel and the origin of its sacred texts* (Finkelstein & Silberman 2001), *Israel in transition: From Late Bronze II to Iron IIA (c. 1250-850 BCE): The texts* (Grabbe 2010), *Egyptianization and elite emulation in Ramesside Palestine: Governance and accommodation on the imperial periphery* (Higginbotham 2000); *Life on the watershed: Reconstructing subsistence in a Steppe region using archaeological survey: A diachronic perspective on habitation in the Jordan Valley* (Kaptijn 2009), *East of the Jordan: Territories and sites of the Hebrew scriptures* (MacDonald 2000), *Archaeology of the Land of the Bible 10,000-586 B.C.E.* (Mazar 1990), *Canaan in the second millennium B.C.E.: Collected essays Volume 2* (Na'aman 2005), *The new encyclopedia of archaeological excavations in the Holy Land* (Stern 1993), *Tribes and Territories in transition: The central east Jordan Valley and surrounding regions in the Late Bronze and Early Iron Ages: a study of the sources* (Van Der Steen 2004).

1.6 NOMENCLATURE

This thesis uses a number of translations from ancient sources and both Modern Hebrew and Arabic. Spelling variations vary considerably as there is no standard rule for transliterating many of these languages into English. One clear example is the bilabial English consonants of 'b', 'v' and 'p' which do not have exact equivalents in the Semitic languages resulting in a number of English spelling options. Two examples are the names of Rehob and Sabuma (Rehov and Sapuma), where the letter 'b' is often replaced with a 'v.' In general, those with a Hebrew background will use a 'v' and those with an Arabic background will use a 'b'.

Similar Hebrew/Arabic leanings are seen in the word 'Tel'/'Tell' where those with a Hebrew leaning use the word 'Tel' and those with an Arabic leaning spell it 'Tell' (although some current excavators such as those from Trinity Southwest University digging at 'Tall' Hammam are trying to make a case for standardizing the spelling as 'Tall') (http://www.tallelhammam.com/uploads/COLLINS_ASOR_2009.pdf accessed 11 December 2011). There is also no standardization for the English spelling of the phonetic doubling of the first consonant of an Arabic proper noun when used with an article (i.e. Tell Shihab verses Tell es-Shihab or esh-Shihab). As there are no specific rules for these transliterations, the author simply attempts to stay consistent with his personal preference. Still, variances of spelling occur as quotations or alternate spellings in the title of a work referred to are not changed.

It is assumed that a number of foreign words such as the Hebrew *nahal* and Arabic *wadi* (both referring to a dry or perennial river gorge) have become cross-over words in the English language (or at least familiar enough to those working in Middle East history/archaeology) that they no longer need to be translated. Therefore these words are not given an English definition or put in italics. Only when using a more uncommon non-English word is the word placed in italics and defined.

Modern names for sites and geographic features will be used with appropriate historical name references given in parenthesis or footnotes.

1.7 DEFINING THE JORDAN VALLEY

The Central Jordan Valley is defined in Chapter 2. The main area of study and reference to the Jordan Valley is highlighted in light grey along with the Jezreel and Harod Valleys as seen in Figure 2.3. On the Palestinian Grid, the focus is located between the east-west grid lines of 210-190 and north-south lines 240-130. However, the topographical formations are the physical definitions of the valley. This study will focus on the valley floor which is at sea level and below. Ridge and valley routes into the valley will be considered up to an angle of slope as to not impede group travel on foot or beast of burden. The major wadi/nahal valley systems as well as the eastern and western highlands will also be briefly covered.

1.8 DEFINITION OF THE LATE BRONZE AGE

The Late Bronze Age was chosen because there is a clear break in the historical and archaeological records between the Middle Bronze and Late Bronze Ages. This break provides a new starting point before the emerging kingdoms of the Iron Age to the modern states begin a long record of political powers vying to utilize the Jordan Valley and connected regions for their own policies. The transition period between the Late Bronze Age and the Iron Age is filled with evidence relating to the emergence of new people groups and the Biblical narratives of Joshua and Judges. Historically, Egypt provides a number of records for most of the 14th and 13th centuries before falling silent for a period. Archaeologically, most Late Bronze Age sites of the Levant were destroyed at the beginning of the 12th century BC (Muhly 1992). This study seeks to provide a picture of the Jordan Valley immediately prior to the fuller and longer-running records of subsequent periods (Iron Age, Assyrian, Babylonian, Persian, Greek and Roman periods) whose political and economic goals may have forced various changes to the Jordan Valley acting as an integrated unit and how it interacted with the east-west highlands. Determining if the Jordan Valley functioned as a single unity and to what extent it interacted with the surrounding regions before the rise of these powers, is a foundation point for understanding the interest and actions of these later powers that involved the geography of and around the Jordan Valley. The findings of this research therefore provide direct foundation stones for the studies of these later periods.

The Late Bronze Age is defined many ways. The transitions between Middle Bronze Age and Iron Age I as well as the subdivisions are open to debate according to the criteria being observed. Predominantly, the Late Bronze Age is divided up into three main sections correlating with the reigns of Egypt's 18th and 19th dynasty Pharaohs. This thesis, with its use of Egyptian sources, will use the divisions of W.F. Albright, A. Mazar (1993:238-239) and A. Rainy (2006), which are:

- LB I 1550-1400
- LB II 1400-1200
 - LB IIA 1400-1300
 - LB IIB 1300-1200

LB I parallels the 18th Dynasty, between the expulsion of the Hyksos and the conquest of Canaan by Thutmose III.

LB IIA is parallel to the latter part of the 18th Dynasty, including the Amarna period and the following period of weakness and turmoil.

LB IIB is parallel to the 19th Dynasty.

The subdivision of the Late Bronze Age I into Late Bronze Age IA (1550-1470) and IB (1470-1400) is mentioned in some sources. However, the lack of clear definitions and boundaries between these two sub-divisions are so unclear that they are of no use at this time. The Late Bronze Age IIB is sometimes referred to as Late Bronze Age III. The distinction is simply the author's preference. Late Bronze Age II's division between A and B usually emphasizes the point that the material between the two segments has changed with the chronology but is basically staying in the same cultural format as Late Bronze Age IIA.

1.9 LIMITATIONS AND ASSUMPTIONS OF THE STUDY

The nature of doing a broad survey across geographical, historical and archaeological grounds results in a large variety of issues to be touched upon and many sources to be consulted. Complicated and controversial issues will undoubtedly be relevant and critical to the research. Many of these issues involve detailed research and lengthy discussion beyond the scope of this thesis. One of the areas this thesis builds upon is the use of the Hebrew Bible for historical information. The validity of the Hebrew Bible as a historical document includes several sub-points, among them are the various theories and associated debates surrounding the composition of the narratives, the dating of the reported events, and the reliability of the accounts according to the author's intent. This author acknowledges that these issues are foundational to the use of the Hebrew Bible. However, the purpose of this thesis is not to further direct research in these areas but rather to explore the application of the relevant narratives of the Hebrew Bible. In the use of the Hebrew Bible narratives, the validity of a historical-critical maximum approach is assumed (1.5.2.1.2).

There are many schools of higher criticism challenging the dates and historicity of the contents of the Hebrew Bible narratives, especially surrounding the emergence of Israel. The emergence of Israel models of immigration (i.e. Alt and Noth), peasant revolt (Gottwald and Mendenhall), and their modified derivatives are not addressed in this thesis. Only a general conquest model is followed. Chapter 3, a literary review of the various historical texts, assumes a *prima facie* reading of the Egyptian and Hebrew Bible narrative texts. At their core, the immigration and peasant revolt models come not from the literary records but from the fields of archaeology and social sciences.⁷ Even though archaeology is one of the key disciplines of a historical geographic hermeneutic and archaeology does reveal a history, the focus of Chapter 3 is on the content of the written or literary history and not the archaeological support of it. Further research, must engage in a study of these other models, but within the limits of this thesis, the immigration, revolt, and two-phase conquest models are not addressed because they depart too radically from the narratives being examined (Waltke 1990:200). Key authors promoting alternatives to the conquest model for further study are Dever, Finkelstein, Moore, Hertzberg, Fritz, Fohrer, Eissfeldt and Miller and Hayes. However, the arguments surrounding these various theories and models outside a *prima facie* use of the Hebrew Bible are purposefully avoided. To address each of the myriad arguments contained in the maximum vs. minimum historical-critical use of the Hebrew Bible would expand this paper to an unruly size.

In assuming a conquest model of the emergence of Israel, this thesis acknowledges both early and late conquest models (see section 1.5.2.1.2). Only the early conquest model is explored in detail as the late conquest model falls at the end of the Late Bronze Age placing the narratives of Judges outside the Late Bronze Age and the scope of this study (Figures 3.19 and 3.20). A historical geographic hermeneutic calls

⁷ Mendenhall's peasant revolt model assumes a historical presence of Israelites but ignores the historical record and uses Marxist ideology to define how the Hebrew people came to be the dominant group. This line of reasoning could be used on any people and is not exclusive to the emergence of Israel. The immigration model is based on an attempt to explain the material remains along archaeological methods as opposed to addressing the historical record.

for both an archaeological and historical line of reasoning. Chapter 5 will attempt to synthesize the evidence from each field, but in Chapter 3 only the literary record with the literary methods described in section 1.5.2.1.2 are used.

Of the literary methods described in section 1.5.2.1.2, it is beyond the limits of this study to discuss the redactional history theories of the Deuteronomistic and 'early history books' of the Hebrew Bible. The subject is too broad to keep within the goal of this thesis which is to be a historical/geographical survey of the Jordan Valley.

This thesis cannot address all the issues surrounding the dating and historicity of the Biblical conquest and the period of the Judges. Section 1.5.2.1.3 stated the assumption in placing these Biblical narratives within the Late Bronze Age. The debate on the use of the Hebrew Bible as a historical source will continue for some time before a consensus (if any) will be reached. In order to focus on the aims of this thesis without adding many more pages, the Hebrew Bible is assumed to have validity as a historical source and contains relevant historical material related to the Late Bronze Age within the author(s)' *Heilsgeschichte*. Without these assumptions the historical record of the Jordan Valley in Late Bronze Age is purely an Egyptian story and section 3.3 on the Biblical record can be eliminated from this paper.

CHAPTER 2: GEOGRAPHY OF THE JORDAN VALLEY

2.1 INTRODUCTION

You cannot live in Judea without being daily aware of the awful deep which bounds it on the east – the lower Jordan Valley and Dead Sea. From Bethel, Jerusalem, Bethlehem, Tekoa and fifty points between, you look down into that deep and feel Judea rising from it almost as a sailor feels his narrow deck or a sentinel his sharp-edged platform of his high fortress. From the hard limestone of the range on which you stand, the land sinks swiftly, and, as it seems, shudders through softer formations, desert and chaotic, to a depth of which you cannot see the bottom; but you know that it falls far below the level of the ocean to the coasts of a bitter sea. Across this emptiness rise the hills of Moab, high and precipitous, and it is their bare edge, almost unbroken, and with nothing visible beyond save a castle or a crag, which forms the eastern horizon of Judaea. The Mountains of the Over-side, or of Those-Across – is more expressive than anything else could be of the great vacancy between (Smith 1974:178-179).

Smith's 1893 description of the Jordan Valley is poetic but the valley is anything but a 'great vacancy.' It connects, forms a border but not a barrier. Egyptian, Canaanite, Israelite, Midianite and Moabite people have all transgressed and fought over this land. The Central Jordan Valley is anything but vacant.

This chapter will examine the physical and human geography of the Jordan Valley and the influential border areas during the Late Bronze Age. Physical geography covers the topics relating to the surface of the earth. This includes the landforms, rocks and soil, flora and fauna, hydrology and climate. Human geography covers the topics relating to human interaction with the environment. This includes settlements, economic activity and transportation routes.

The geographic material will be examined with the following two questions in mind:

- Was the Jordan Valley an integrated political/economic unit?
- To what extent was the Central Jordan Valley interacting with the eastern-western highlands and the larger region during the Late Bronze Age?

To understand the activities of humans in the Jordan Valley during the Late Bronze Age, it is necessary to first understand the physical geography of the Jordan Valley. This is much like learning to play a game such as chess; before interacting with the

individual pieces, one must know the parameters of the game board and how the various squares/blocks govern the movement of individual pieces. Once the 'ground' rules have been established, the various movements and interplay between the sides may be applied and studied.

2.2 PHYSICAL GEOGRAPHY

As Asia and Africa meet in this narrow land bridge that is the southern Levant, between the Mediterranean and the Arabian Desert, local physical formations further divide the land into two north-south passages. The fault lines that lifted the western and eastern highlands do not by themselves form major obstacles to the movement of people and products. It is the great rift that separates these highlands into two ranges that makes the greatest barrier, both by accentuating their 'height' with its plunging depth and by its sharp steep escarpments. The Central Jordan Valley directed all traffic between Egypt and the great empires of the Fertile Crescent into a north-south orientation.

The Jordan Valley is popularly considered as part of the Great Rift Valley. The Great Rift Valley is a term first used by British explorer/geologist John Gregory in the 19th century (Gregory 1896) to describe a long fault line running over 6,000 kilometers (3,700 miles) from central Mozambique in East Africa into northern Syria. This 'Great Rift Valley' is actually made up of several rift and fault systems. The northern section in this series is the Dead Sea Transform. This Rift, running north to south forms

- the Beqaa Valley separating the Lebanon and Anti-Lebanon Mountains;
- the Hula Valley separating the Galilee and Golan Heights (the Jordan River begins in this section flowing into the Hula Lake and the Sea of Galilee before exiting into the Jordan Rift Valley and into the Dead Sea);
- the Jordan Rift Valley between the Sea of Galilee and the Dead Sea;
- the Dead Sea;
- Wadi Arabah;
- the Gulf of Aqaba;
- and finally the Red Sea.

These make up the Dead Sea Transform before joining the Aden Ridge and East African Rift at the tip of Sinai to form 'The Great Rift Valley.'

The Hula Valley, Jordan Rift Valley and Arabah are sometimes collectively or individually called the Jordan Valley. This gives rise to the Jordan Rift Valley (between the Sea of Galilee and the Dead Sea) being referred to as the Central Jordan Valley. Although the Central Jordan Valley is referred to several times in this paper, the general term 'Jordan Valley' is used when referring to the valley between the Sea of Galilee and the Dead Sea. The term northern, central or Southern Jordan Valley refers only to this section of the valley. References to the northern or southern parts of the Jordan Valley are not to be confused with the Huleh or Arabah sections.

2.2.1 Regional location/survey of bordering regions

The Jordan Valley is the most prominent geographic feature of the southern Levant. The valley marks the division between Transjordan of the east and Cisjordan of the west. The narrow strip of land 120 kilometers (75 miles) between Tel Aviv and Amman, between the Mediterranean Sea and the eastern desert that makes up the southern Levant, can be divided into four main geographical zones. Moving west to east, they are:

- the Coastal Plain,
- the western highlands,
- Jordan Valley and
- the eastern highlands.

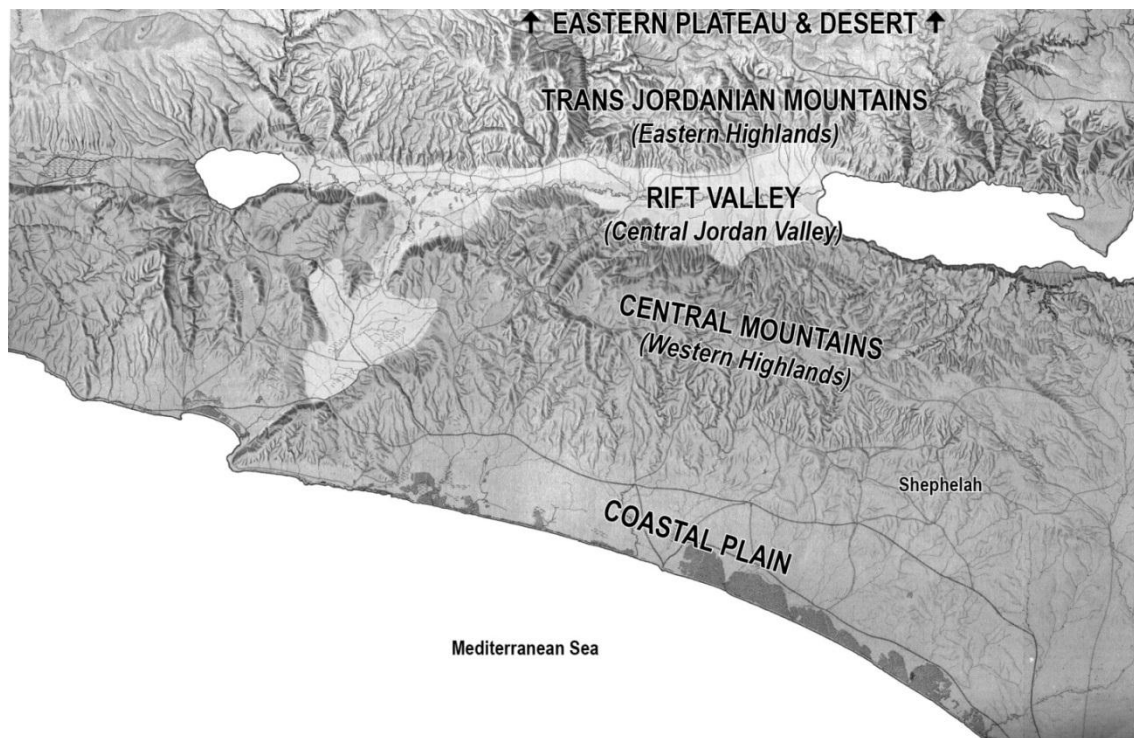


Figure 2.1: The longitudinal geographical bands of the southern Levant
(Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011)

The western and eastern highlands are punctuated by numerous steep eroded valleys running east-west in direction that impede movement in north-south directions. Only a few of these valleys or corresponding ridges provide access into or through the Jordan Valley. These limited east-west passages magnify the strategic nature of the Jordan Valley. They form barriers and connecting points for international traffic between Egypt and the Asian empires (the coastal and Trans Jordanian highways) and form isolated pockets of refuge for local populations to develop in the connecting highlands. When Egyptian imperial power was weak, these populations expanded and competed to dominate the region with some of the most intriguing local competition occurring in the Iron Age. The areas surrounding the Jordan Valley are the major playing fields for these emerging nations of the Iron Age. Geography usually changes slower than people and therefore the resources and formation of the land shape the people who live in it. Therefore it is worth taking a brief survey of the areas surrounding the Jordan Valley.

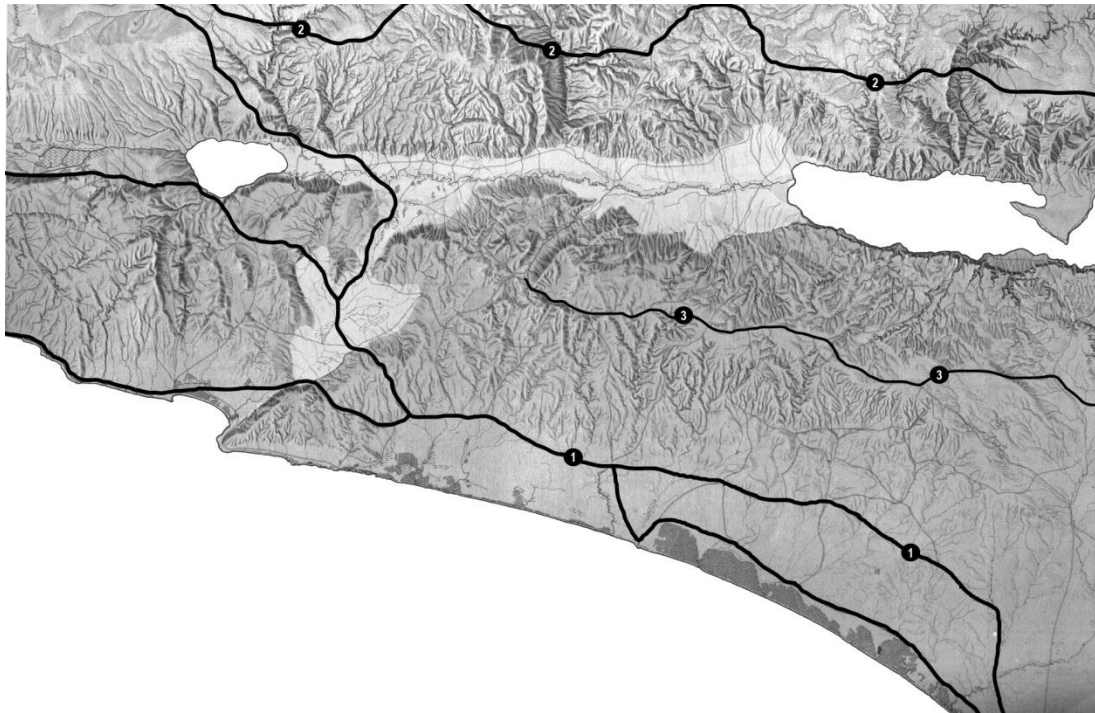


Figure 2.2: The two main international 'highways' of the southern Levant

#1 - The Coastal Route. #2 - The King's Highway. #3 is a regional route that runs the length of the western highlands. It is often referred to as the Central Ridge Route. The Central Jordan Valley and the larger Rift Valley force these two north-south routes to remain parallel connected only by secondary regional routes except through the northern section of the Jordan Valley (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

The narrow passage way for the two international highways, the coastal and Trans Jordanian, is the major factor that has thrust this region onto the world stage so often in history. Figure 2.2 shows how the geography of the southern Levant funnels international movement in a north-south direction and how the Jezreel/Harod Valley forms a strategic gateway of international importance. On a regional basis, there are smaller gateways along the valleys and ridges into the bordering areas. These gateways and the surrounding regions themselves add to the development and importance of the Jordan Valley. These are the geographic regions of the Bashan, Golan, Gilead and the Madaba Plateau (on the eastern side). The western border is made up of the Galilee, Jezreel Valley, and western highlands (see Figure 2.3).

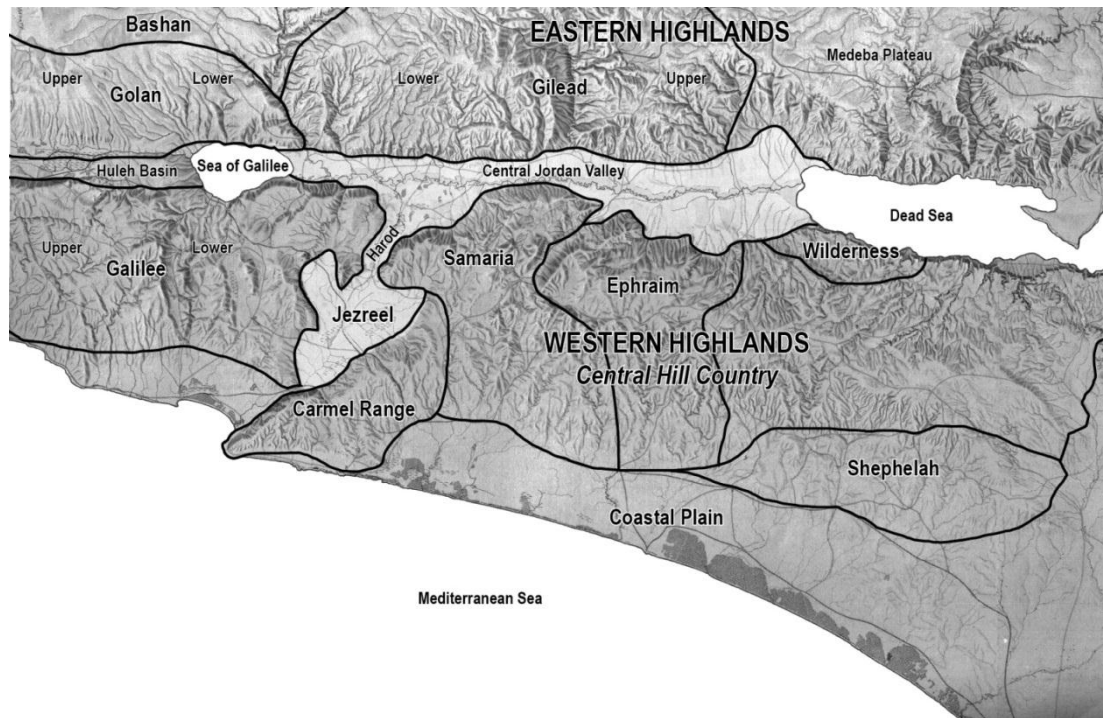


Figure 2.3: The regions surrounding the Jordan Valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

2.2.1.1 The Bashan

The Bashan links the Jordan Valley to the Damascus Plateau and to the major caravan routes and city centers of Syria and beyond. The Bashan basin is covered by a hard basaltic crust which breaks down into a rich soil. The rich soil combined with ample annual rainfall supported the growth of large settlements and trade through farming and grazing cattle. Its relatively flat terrain and proximity to the trade hub of Damascus facilitated a network of trade routes north, east, and south down the ridges around the Yarmuk Canyon. Bashan's agriculture and commercial resources were great enough to support sixty towns including the royal city of Og in the time of Moses and Joshua (Deuteronomy 3:4; Joshua 13:30). The Bashan's rich agricultural resources, extensive trade network and many settlements supported not only the development of local political entities but attracted the interest of neighboring and imperial powers. (cf. Monson and Lancaster 2008:2-3, 10-15; Rasmussen 2010:33-35).

2.2.1.2 The Golan

The Golan is a tilted basaltic plateau draining into the Huleh basin and the Sea of Galilee. It is divided into two categories by elevation, the Upper and Lower Golan.

Elevation of the Golan ranges from 915 meters (3000 feet) at the base of Mount Hermon and drops to 371 meters (1217 feet) in the Lower Golan at the edge of the Yarmuk Canyon. The Golan receives significant rainfall (800 mm [31 inches] in the higher elevations and 50mm [19 inches] in the Lower Golan) that has exposed large boulder fields and created small basins of fertile soil that supported small farming settlements and herds of livestock. The exposed boulder fields discourages large farms and general travel in the Golan because only a few ridge routes allow travel through the Golan between the Bashan, Huleh Valleys and the southern tip of the Sea of Galilee. During the time of Israel's Divided Kingdom and the prophets, the Golan heights and Bashan plateau were famous for their oak forests (Isaiah 2:13; 1 Kings 20:23-30). In the Biblical texts, the Golan is always associated with the Bashan and with an emphasis on its grazing land – 'Golan in Bashan ...and its grazing lands' (Deuteronomy 4:43; Joshua 21:27; 1 Chronicles 6:71) (cf. Monson 1998; Monson and Lancaster 2008: 2-3, 10-15).

2.2.1.3 Gilead

Bordering the Bashan and Golan to the south and making up most of the eastern highlands is the formation of Gilead. Gilead is divided by the Wadi Jabbok (modern Zerqa River). The upper two thirds north of the Jabbok is referred to as Lower Gilead in comparison to the elevation of Upper Gilead or the Dome of Gilead south of the Jabbok. The boundaries of Biblical Gilead include both Upper and Lower Gilead as a whole or one or the other in more restrictive uses. In Numbers 32:1, Joshua 22:9, 15 and II Kings 10:33 it is used with the widest meaning referring to the area between Wadi Hesban in the south and the Yarmuk River in the north. In Numbers 32:39-40m; Deuteronomy 3:15 and Joshua 17:5-6 it is used to describe the territory of Machir-Manasseh north of the Zerqa/Jabbok River. In Numbers 32:1 and Joshua 13:25 it describes the area south of the Zerqa/Jabbok River restricted to the tribes of Reuben and Gad. The Zerqa/Jabbok Valley divides the region into two halves – Lower and Upper Gilead. Upper Gilead is in the south and is referred to as 'upper' due to the higher elevation over the north Gilead.

2.2.1.3.1 Lower Gilead

The Lower Gilead is primarily made up of softer limestone and chalks except for an area of basalt around the Yarmuk Canyon and the ruins of Gadara. The top of Lower Gilead has eroded into rolling hills towards the north and western escarpment. The eroded limestone and chalks form a poor soil that does not compete with the high level of agricultural production of the Bashan plateau. Imperial powers as well as expanding local kingdoms therefore focused on going through (rather than settling in) Lower Gilead to the more productive fields of the Bashan or the Madaba Plateau. Erosion of the soft limestone and chalk has created a number of deep wadis running west into the Jordan Valley. These wadis create a drainage network for water from the eastern highlands to the valley as well as alluvial fans of soil suitable for some agriculture in the valley. They also force all north-south traffic to the eastern plains away from the Jordan Valley. The Yarmuk Canyon, forming the border between Bashan and Gilead, is the last large barrier for north-south traffic. The various trade routes coming from the south, eastern plateaus, the Damaskan/Bashan plains and two ridge routes coming up from the Jordan Valley created a transportation/trade hub that allowed settlements like Ashtorath, Yonoam and Ramouth-Gilead to become strategic points of value for political and economic power.

2.2.1.3.2 Upper Gilead

Upper Gilead is made up of a harder limestone dome than northern Lower Gilead. Plentiful rainfall has eroded this hard limestone into fertile soil for grain production nourished by perennial springs along the wadis. The Jabbok River drains most of Upper Gilead. Starting in modern Amman, it flows northeast, north and then west cutting a deep canyon through the limestone and sandstones. The Jabbok River divides the eastern highlands into a north-south perspective from the Jordan Valley. The canyon provides a major access point between the valley and highlands, funneling east-west traffic into this area. The large amounts of eroded soil brought from the highlands to the valley floor by the river, provides for rich farming in the Zerqa's large alluvial pan on the valley floor. The terrain provided water and foliage that was excellent for raising livestock: 'The Reubenites and Gadites, who had very

large herds and flocks, saw that the lands of Jazer and Gilead were suitable for livestock' (Numbers 32:1).

The deep east-west wadis provided boundaries for various political entities:

Israel, however, put him to the sword and took over his land from the Arnon to the Jabbok, but only as far as the Ammonites, because their border was fortified (Numbers 21:24).

... Sihon king of the Amorites, who reigned in Heshbon. He ruled from Aroer on the rim of the Arnon Gorge—from the middle of the gorge—to the Jabbok River, which is the border of the Ammonites. This included half of Gilead (Joshua 12:2).

The territory extending from Mahanaims and including all of Bashan, the entire realm of Og king of Bashan—all the settlements of Jair in Bashan, sixty towns, half of Gilead, and Ashtaroth and Edrei (the royal cities of Og in Bashan) (Joshua 13:30–31)

(cf. Monson 1998; Monson and Lancaster 2008:2-5, 10-19; Rasmussen 2010:57-59).

2.2.1.4 Madaba Plateau

The Madaba Plateau extends south of Upper Gilead to the Arnon canyon. Its rich soil and rainfall has supported numerous large and small settlements throughout history. This plateau is one of the eastern highland's most strategic areas. Besides its fertile fields, the main north-south Transjordanian transportation route (later known as the King's Highway) crosses the plateau and intersects with secondary routes coming from the east. The sloping eastern escarpment, with the wadis Kafrein and Hisban, provide relatively easy routes into the Jordan Valley, creating a crossroad between Gilead in the north, Ammon to the northeast, routes from the far east as well as points south (cf. Monson 1998; Monson and Lancaster 2008:5, 12-13, 17-19; Rasmussen 2010:61-63).

2.2.1.5 The Lower Galilee

The Lower Galilee is a fragmented landscape caused by a number of side faults off the main Rift. The geology is a mixture of hard basalt interspersed with various limestone and softer chinks. The hard basalt is concentrated along the eastern escarpment to the Jordan Valley. The central and western parts of the Lower Galilee are broken up by the various faults and eroded wadis of the softer stones. The soil

and topography makes these areas a mix of agriculture on the plateaus and herding of livestock along the rocky wadis. A branch of the great coastal highway makes a cut through the Lower Galilee at the Horns of Hittim before descending to the Sea of Galilee and then heads north to Hazor. This route bypasses the eastern basaltic agricultural fields and wadis of the eastern Lower Galilee, secluding this area and isolating the few ridge routes down into the Jordan Valley to local significance. The only exception is the Jabneel Valley which provides a route (Route G section 2.3.2.2.2) from the Yarmuk plain in the Jordan Valley towards the Golani junction and the Horns of Hittim in the central Lower Galilee (cf. Monson 1998; Monson & Lancaster 2008; Rasmussen 2010:37-39).

2.2.1.6 The Jezreel Valley and Harod Valley

The Harod Valley provides a strategic pass between the Jordan and Jezreel Valleys. The Harod is only 2-3 kilometers (1.2-1.8 miles) wide and 11 kilometers (6.8 miles) long. The Harod stream flowing towards the Jordan River created marshes and swamps down the center of this pass until modern water management practices contained them (Karmon 1971:192). The Jezreel Valley, with its chalk mountain passes through the Carmel Range and creates a wide gentle slope to the Jordan Valley via the Harod/Beth-shan Valley. This is the central gravitation point for political and economic control of the southern Levant. Control of these passes regulates all traffic along the coastal highway north-south between Egypt and the northern empires as well as west-east traffic between the coast and eastern desert. The northwest passes at Jokneam open routes towards Phoenicia and the port of Akko. The northeast routes up the Nazareth ridge head towards Hazor. The southwest passes through the Carmel ridge connect the valley with the Coastal Plain and Egypt. The southeast pass through the Harod/Beth-shan Valley connects to Gilead, Arabia, Bashan and Damascus Plateau. The Jezreel Valley divides the western highlands from the Galilee. The Jezreel divides into three natural bays with rich agricultural lands. These are: the Tabor plain in the northeast just below Mount Tabor, the Gilboa plain in the southeast and the Jokneam/Shimron plain in the northwest. The center of the

Jezreel was swampy in ancient times and must have kept transportation routes along the higher grounds on the peripheral of the valley floor.⁸ The break between the heights of the western highlands and Upper Galilee made by the Jezreel/Harod valleys and Lower Galilee, allows rain laden clouds to continue east and to bring rain to the northern part of the Jordan Valley. The rich agriculture soil supported development of several big cities.

The Jezreel Valley has always been coveted by imperial powers and any expanding regional powers. With its numerous points of entrance it is difficult to defend. When a strong central force was absent, marauders from as far as Midian in the east would plunder its produce (Judges 6-7). The narrow Harod Valley forms the gateway between the Jezreel and Jordan Valleys. The Spring of Harod provides a perennial water supply which, combined with the rich soil, allowed for the development of large cities such as Beth-shan and Rehob. Water, agriculture and location along this key transportation route combined to make these cities strategic centers for projecting political, military and economic power between the Jordan and Jezreel Valleys (cf. Monson 1998; Monson & Lancaster 2008:2-5, 10-17; Rasmussen 2010:39-40).

2.2.1.7 The western highlands

The western highlands, often referred to as the Central Hill Country, is a series of Eocene, Senonian and Cenomanina uplifts (see 2.2.2.2 for unique aspects of these rock formations). These underlying rock formations break up the western highlands into three divisions as it borders the Jordan Valley. They are: the Hills of Samaria and Ephraim and the Wilderness. The eastern escarpment of the western hills is much sharper and dramatic than the eastern highlands. The harder limestone has fewer but sharper wadis giving less access between these regions. All north-south traffic is limited to a single central ridge running the length of the highlands. The watershed and rain shadow (see Figures 2.6 and 2.25) run very close to the edge of the eastern escarpment, preventing very little drainage to the east. What drainage there is, is

⁸ Rainey, A. Jerusalem University College Lecture October 5-8, 2001.

primarily underground and surfaces at the base of the escarpment in springs (cf. Monson 1998; Monson & Lancaster 2008:2-5, 10-17; Rasmussen 2010:46-48).

2.2.1.7.1 Samarian Hills

The diversity of chalks and hard and soft limestone, complicated by several small faults, breaks Samaria up into a variety of mountains and ridges. The softer limestone and chalks have eroded down so the ridges and valleys are much gentler than further south, offering more routes into the highlands, especially from the north but not from the eastern bulge, creating 'the waist' of the Central Jordan Valley. The Farah Valley presents a gentle slope into the Samarian Hills from the Jordan Valley (cf. Monson 1998; Monson and Lancaster 2008:2-5, 10-17; Rasmussen 2010:45-46).

2.2.1.7.2 Ephraim Hills

The majority of Ephraim is one large uplift of Cenomanian limestone. Only at the edge of the eastern escarpment are there softer chalks (on the northern half) and softer Senonian limestone (towards the southern end). Rainfall has eroded these softer chalks making sharp breaks through the Cenomanian limestone, forming deep V-shaped valleys running east-west, making it very difficult for travel off the central north-south ridge route. There are no major east-west routes from the coastal plain or the Jordan Valley running into the Ephraim hills (local routes such as route T, section 2.3.2.2.4, do provide some access). Only at the southern edge of the Ephraim Hills where they meet with the Wilderness, in the area that Joshua ascribes to the tribe of Benjamin, does a ridge route running from Bethel to Jericho branch off from two other ridge routes running east-west through the Wilderness. They provide easy local access to and from the Jordan Valley (route U section 2.3.2.2.4) (cf. Monson 1998; Monson & Lancaster 2008: 2-5, 10-17; Rasmussen 2010:46).

2.2.1.7.3 The Wilderness

The Wilderness is primarily made up of chalks. This sterile soil, compounded by its location just beyond the rain shadow, allows for little vegetation. It is possible to graze small herds in this area only in the odd years when unusual rain patterns

extend the rain shadow to the east. Near Jericho, three ridge routes (route V section 2.3.2.2.4) provide relatively easy local access between the western highlands and the Jordan Valley. The two main routes travel the ridges along the Wadi Kelt and Makkuk. The Wadi Kelt route leads to Jerusalem. The Makkuk ridge route leads to the Central Benjamin Plateau with its strategic hub of routes connecting the northern and southern parts of the western highlands. A third route ascends from the Jordan Valley up the shallow Zeboim Valley directly towards Bethel passing near several candidates for the city of Ai. Between the southern end of the Jordan Valley, going southwest towards Bethlehem, the chalk wilderness presents rolling desolate hills until meeting the sharp limestone escarpment of the Judean Hills (cf. Monson 1998; Monson & Lancaster 2008:4-6, 12-21; Rasmussen 2010:48-49).

2.2.2 Description of the Jordan Valley

The Hebrew Bible uses two words for the Jordan Valley:

- the Deep (עֲמֻקָּה - deepening, depth, Joshua 13:27) used for a valley or lowland, and
- the Opening (בִּקְעָה – an open valley plain, Deuteronomy 34:3) of the north under Hermon (Joshua 11:17) (Browns, Driver and Briggs 1997).

The Egyptian literature uses 'Emeq', a general term for a valley and then adds a nearby city to distinguish which valley, as in 'the valley of Rehob' (Sayce 2006:93). Greek writers call the Jordan Valley the Aulon or Hollow (Smith 1974:311). In Arabic it is called the Ghor (the depression). This great deep open depression or valley between the Sea of Galilee and the Dead Sea is only 105 kilometers (65 miles) long. Steep escarpments of the eastern and western highlands form its sides while the valley itself slopes downward from the Sea of Galilee to the Dead Sea. The western escarpment is formed by the Lower Galilee, Samarian and Ephraim Hills with a break of the Harod Valley opening up to the Jezreel Valley between the Galilee and Samarian Hills. The western escarpment ranges between 250 and 450 meters (800 and 1500 feet) above the valley floor with higher ranges even farther to the west. The eastern escarpment of the Gilead hills is higher than the west, averaging about

610 meters (2000 feet) above the valley floor in a continuous line broken only by a few sharp Wadis (see Tables 2.1 and 2.2 and Figures 2.7 and 2.8).

Between the eastern and western highlands, the Jordan Valley varies in width from 3.2 kilometers (2 miles) to 23 kilometers (14 miles). For 21 kilometers (13 miles) south of the Sea of Galilee, the width is no more than 6 kilometers (4 miles), and then expands to 10 kilometers (6 miles) as it opens up to the Harod Valley, which rises by a terrace towards the plain of Jezreel. 16 kilometers (10 miles) south of Bethshan, the Samarian hills bulge eastward and for the next 21 kilometers (13 miles) there is very little plain between the river and the western escarpment and the valley is only 3 kilometers (2 miles) wide. This narrow area is sometimes called 'the waist' of the valley or the Central Jordan Valley. Further south, the Samarian hills withdraw westward, and the valley widens, first to 13 kilometers (8 miles) and then to 22 kilometers (14 miles). The widest part of the valley is between the Plain of Jericho on the west and the Plains of Moab in the east (cf. Google Earth).

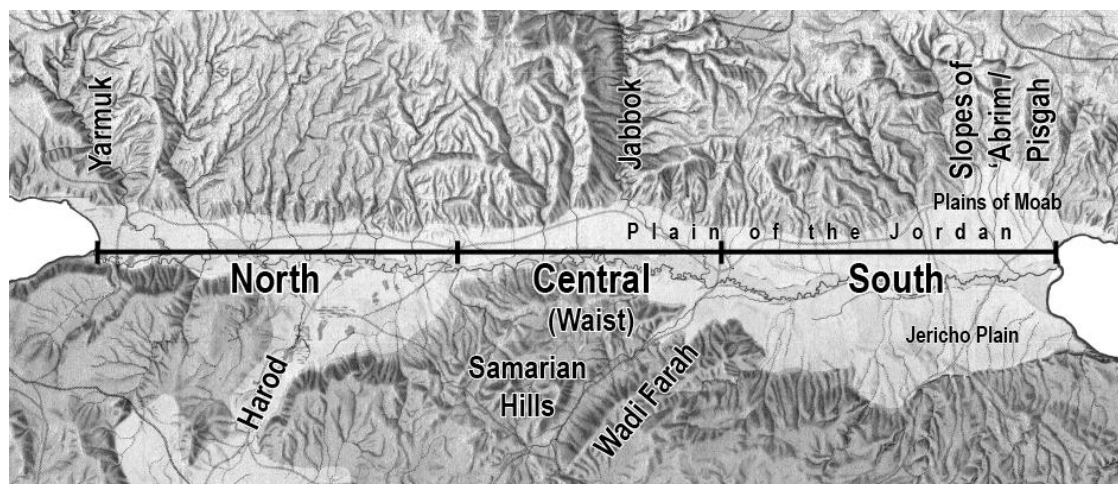


Figure 2.4: The Jordan Valley divided into three sections

'The Plain of the Jordan' is a term used in the Bible that focuses on the alluvial fan around the Wadi Jabbok but can also include the whole southern section as well (1 Kings 7:46) (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Both the north and south ends of the valley are only 60 kilometers (36 miles) and 69 kilometers (43 miles) from the coastal plains. The south end of the valley is blocked off from the coastal rain clouds by the much higher Ephraim Hills of the western highlands with their steep descents and narrow ridges and then passes the lower

Samarian and Galilee Hills (with the break of the Jezreel and Harod Valleys). The result is a more isolated and drier south compared to the wet and open north.

The long narrow Jordan Valley can be divided into three zones on both longitude (north-south) and latitude (east-west) axes. Across the latitudinal axis, the valley floor has three distinct regions: the Ghor, Qattara and Zor (see 2.2.2.3 and Figure 2.16). Along the longitudinal axis, there are several ways to divide the valley.

From the eastern escarpment, the valley can be divided by the three main east-west routes into/out of the valley, the Yarmuk and Jabbok Canyon ridges and the slopes of 'Abarim or Pisgah. This study will use a simple north, central (or 'the Waist') and south division. The northern section runs from the Sea of Galilee to the end of the Beth-shan Valley. The Central Jordan Valley is the narrow 'waist' caused by the eastern bulge of the Samarian Hills to the widening plain at the mouth of the Farah Valley. This includes the large alluvial pan around the mouth of Wadi Zerqa/Jabbok that the Bible calls 'The Plain of Jordan': 'In the plain of the Jordan the king cast them, in the clay ground between Succoth and Zarethan' (1 Kings 7:46). The south section is the widest portion of the Jordan Valley measuring 24 kilometers (15 miles) from east to west. This large plain absorbs the waters of the Wadis Qelt and Nueima, which lie to the southwest of Jericho and the Wadis Shu'eib, Kafrein and Hisban on the east. The Bible refers the western side as 'the Plain' or 'Valley of Jericho': 'Then Moses went up from the plains of Moab to Mount Nebo, to the top of Pisgah, which is opposite Jericho. And the LORD showed him all the land ... the Plain, that is, the Valley of Jericho the city of palm trees' (Deuteronomy 34:1–3). The eastern side is referred to as 'The Plain of Moab': 'They left the mountains of Abarim and camped on the plains of Moab by the Jordan across from Jericho. There on the plains of Moab they camped along the Jordan from Beth Jeshimoth to Abel Shittim' (Numbers 33:48–49).

Although this division of the Central Rift Valley into north, central and south segments is not formally used or has technically defined boundaries, these divisions make sense in light of the geography (see Figure 2.4), the transportation routes (see 2.3.2 and Figure 2.43) and the agriculture patterns of the valley (Figure 2.14). In brief, the northern section of the valley has rich soil, adequate rainfall supplemented

by the Jordan, Yarmuk and Harod Rivers for large agricultural fields. The central section has poorer soil and receives little rain. The Jordan River is too deep in the Zor for irrigation beyond its bank. Agriculture is limited to the alluvial pan of the Jabbok River. In the south, the soil is even poorer, the rain almost totally absent and agriculture (without modern irrigation) is limited to the few springs and wadis near the base of the escarpments.

Settlement patterns and density appear to correlate with agricultural potential of these three divisions of the Jordan Valley. The historical record reflects these divisions as well and the amount of information available from the ancient texts is in proportion to the richness of the soil and amount of rainfall to each section. There are also three traditional regions for fords across the Jordan River: near Beth-shan in the north, around Adam in the center and across from Jericho in the south.⁹

2.2.2.1 Elevations

The southern end of the Jordan Valley and the surface of the Dead Sea are the lowest places on earth that man can live without being underwater. The whole of the valley is below sea level. The mouth of the Jordan River, where it enters the Dead Sea, is 422 meters (1388 feet) below sea level. In the north where it exits the Sea of Galilee, it is only 214 meters (702 feet) below sea level. In its 105 kilometers (65 mile length), the Jordan Valley drops 208 meters (686 feet). If the Jordan River ran straight, the average elevation drop would be more evident than it is. However the meandering Jordan River takes 251 kilometers (156 miles) to make the 208 meter (686 feet) drop from the Sea of Galilee to the Dead Sea. Small ridges and lifts back the river up giving it a slow current between short sections of rapids where it spills over these ridges in short descents. Traveling on land, north-south through the valley, the descent is most noticeable on the western side around the 'waist' but is still a gentle hill at most and foot traffic is not impeded by the change of elevation in the outer Ghor section of the valley floor (the chalky Qattara section is broken by

⁹ For a detailed study of the Beth-shan Valley during the Middle Bronze II Period see A. Maeir's *The Material Culture of the Central Jordan Valley During the Middle Bronze II Period: Pottery and Settlement Patterns* (unpublished Ph.D. dissertation, The Hebrew Univeristy, Jerusalem, 1997).

east-west ravines draining into the Zor and Jordan Rivers and does not allow north-south traffic). The various elevations and distances of this section and those following are a composite of measurements and listings taken from Google Earth, Monson 1998; Monson & Lancaster 2008; Israel, The New Road Atlas 1996 and The Hashemite Kingdom of Jordan (Archaeological Map):1978.

Table 2.1: Elevations of the Jordan Valley floor

Section of valley	Elevation of valley floor
South end of Sea of Galilee	-214 meters/-702 feet
Beth-shan Valley (north end)	-237 meters/-777 feet
Beth-shan Valley (south end)	-288 meters/-945 feet
Central (near Adam at W. Farah)	-330 meters/-1148 feet
South (mouth of Dead Sea)	-400 meters/-1312 feet

The changing elevation of the escarpments has a greater effect on the climate of the valley than the drop of the valley floor. The following graphics show the difference in elevations of the escarpments of the three regions of the valley:

Table 2.2: Average elevations of the escarpment above the valley floor

Section of valley	West escarpment	East escarpment
North	366 meters/1200ft	579 meters/1900ft
Central	396 meters/1300ft	914 meters/3000ft
South	1066 meters/3500ft	1128 meters/3700ft

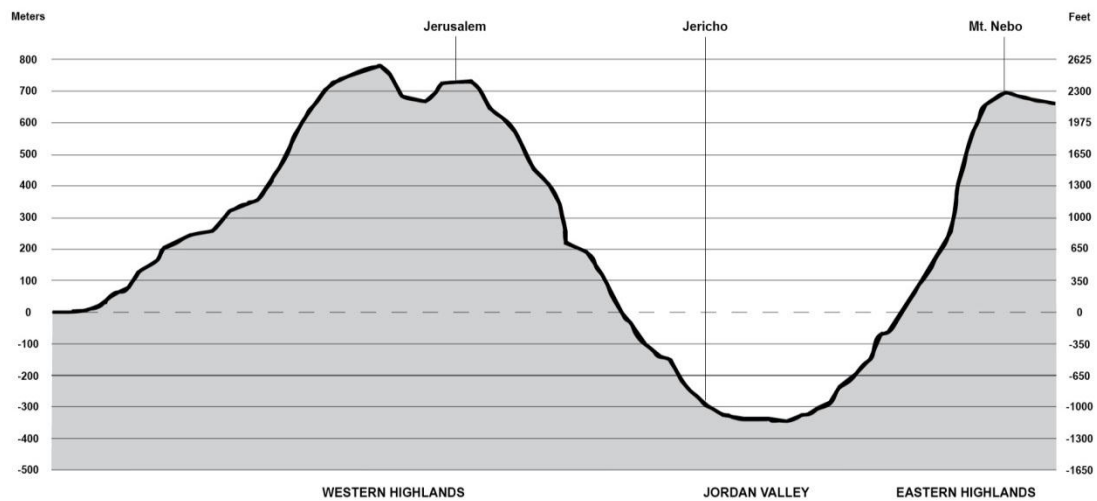


Figure 2.5: Topographical cross section west to east of the southern section of the Jordan Valley
(Illustration: J.M. Schaaf 2011)

The western and eastern highlands both continue to rise beyond the initial escarpment into the valley. The biggest effect of these elevations of the highlands is the shifting of the rain shadow and watershed for the Jordan Valley. The various watersheds will be examined in detail in section 2.2.2.6.

In the southern section, the escarpments are 1066 meters (3500 feet) above the valley floor at an elevation of 771 meters (2544 feet). In the central section, the Samarian Hills have an elevation ranging from 670 meters (2198 feet) (around Shiloh) to 500 meters (1640 feet) (at Mt. Gilboa). Mt Gerizim and Ebal peak at 881 meters (2890 feet) and 940 meters (3084 feet) respectively, but, in general, the western highlands drop in elevation as they move north. This allows the rain shadow to progressively move east into the valley as one moves north. Since the prevailing weather patterns bringing precipitation come from the west, the western elevations affect the rain shadow.¹⁰ The rain shadow of the western highlands is most obvious

¹⁰ A rain shadow is the area on the leeward side of a highland that does not receive rainfall. It is created by elevation of the highland, causing the air to rise and its precipitation to condense and fall on the windward side of the highlands. Dropping the precipitation, the dry air flows over and down

on the Jerusalem to Jericho highway during the winter rains when all the western sides of the successive hills are green and the eastern sides remain bare and brown.

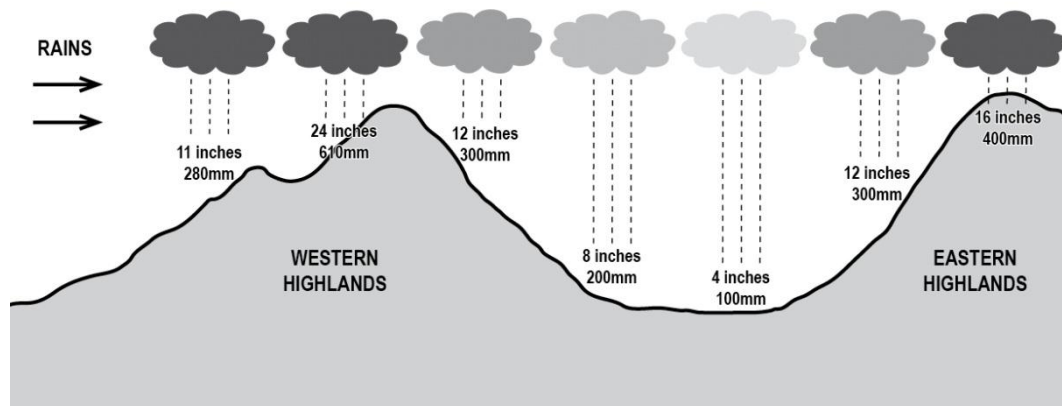


Figure 2.6: The rain shadow and resulting precipitation across the Southern Jordan Valley
Precipitation moves west to east across the southern Levant (Illustration: J.M. Schaaf 2011).

The following two topographical charts show the relative elevation of the western and eastern escarpments running north to south. In examining the first graphic (representing the western escarpment) one should note how the higher elevations of the south (from Mt. Ebal past Jerusalem) casts a longer 'rain shadow' east than the northern escarpment. The opening of the lower Gilboa mountains/Harod Valley and Lower Galilee allow clouds (heavy with moisture) to pass east to dump their precipitation on the northern section of the Jordan Valley that the heights of the southern escarpment block.¹¹

the leeward side of the highland creating a 'shadow' of dryness. The dryness is compounded, not just by the lack of rain, but by the lower humidity which increases evaporation.

¹¹ The peaks and valleys in these figures are distorted by compacting the north-south distances into the figures. The main purpose of the figures is to emphasize the changes of elevation and the effects on the rain shadow and transportation.

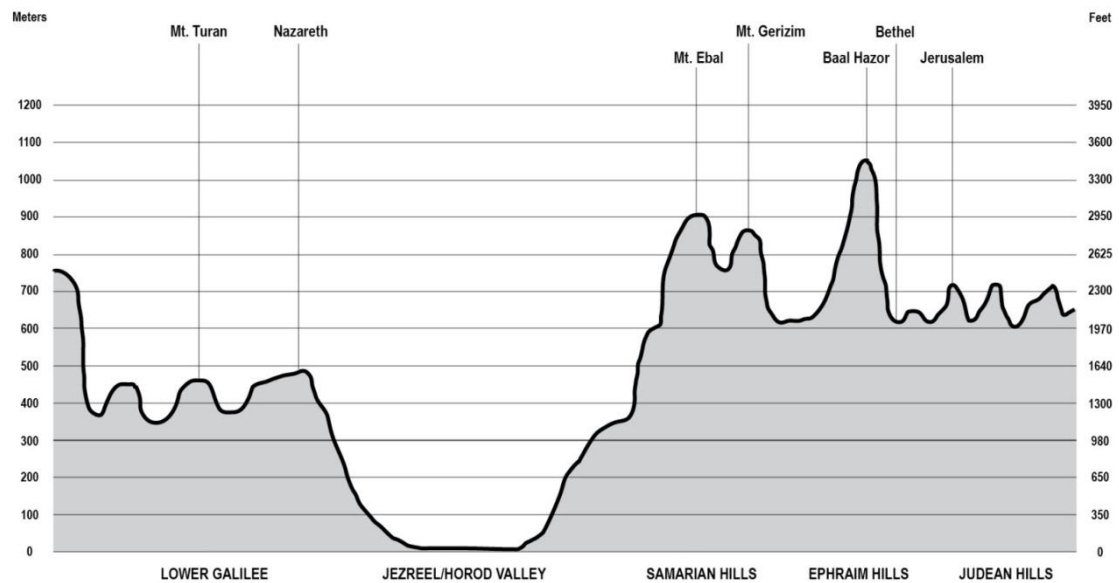


Figure 2.7: Topographical cross section of the western escarpment - north to south
(Illustration: J.M. Schaaf 2011)

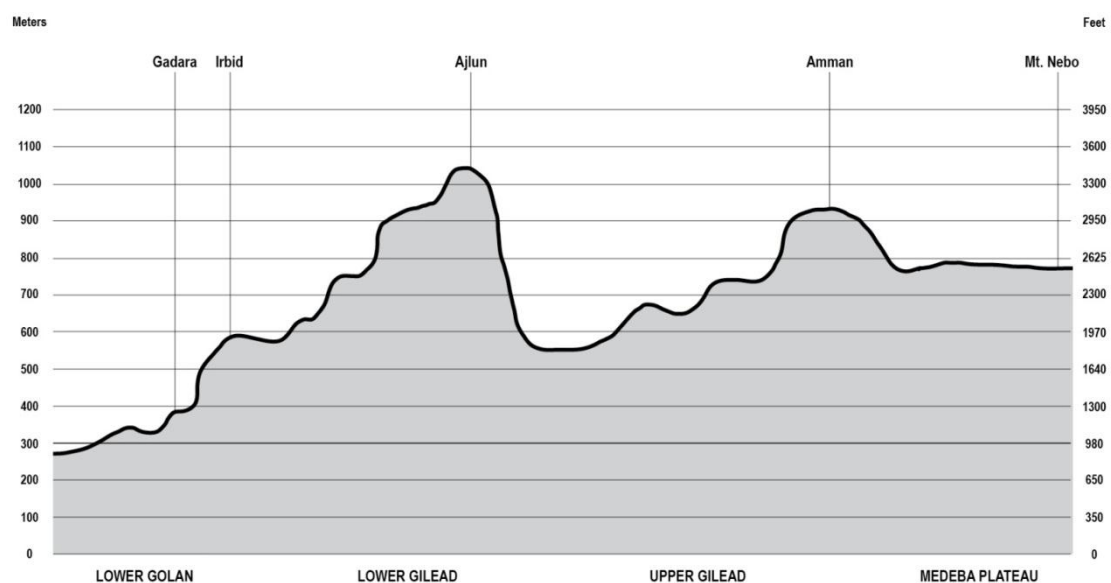


Figure 2.8: Topographical cross section of the eastern escarpment - north to south
(Illustration: J.M. Schaaf 2011)

2.2.2.2 Geology of the Jordan Valley (soils and minerals)

The valley floor is mostly made up of alluvial soils eroded from the rocks of the highlands. These alluvial soils cover the sterile and salty deposits of a pre-historic lake called Lake Lisan or Lake Gomorrah (depending on the geological age). These chalky and salty soils are exposed in the lower elevations of the southern third of the valley and along the Qattara longitudinal zone of the valley.

The geology of the escarpment and surrounding regions not only contributes to the soils of the Jordan Valley, but affected the human transportation and settlement patterns of the valley as well as the highlands. Figures 2.9-13 show a simplified geological map of the types of rock found surrounding the Jordan Valley. Each rock type has different characteristics that affect the quality of farming soil that it forms, the suitability for building materials, for storing or transporting water and the way it erodes (effecting possible transportation routes). They are listed here by geological period (oldest to youngest) (cf. Monson 1992; Monson 2008:24-25). For more precise and color coded geological maps see Monson (2008:12-13) who formed the basis of these maps along with Baly (1957:15-42). The alluvial farmlands of the Jordan Valley are made from the breakdown of these rocks carried down from the highlands by eroding water.

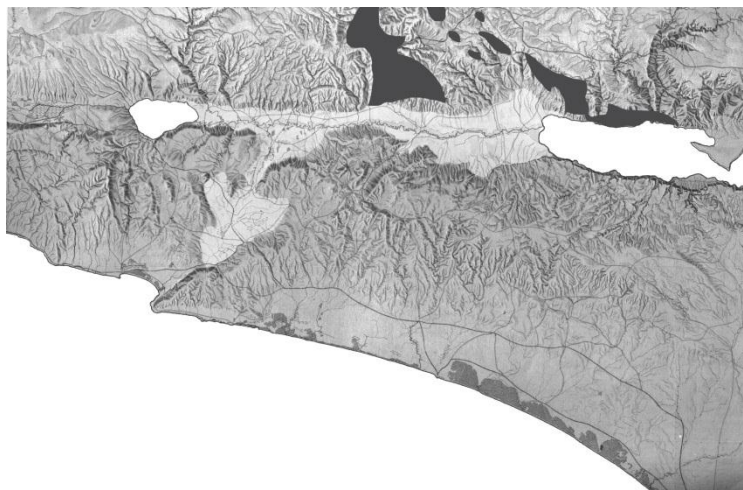


Figure 2.9: Jurassic period rocks (shaded areas) are metamorphic and hard sandstones
The Zerqa Valley walls and the escarpment of Upper Gilead is largely exposed hard Jurassic rock. Small outcrops surface along breaks in the Samarian Hills and escarpment (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

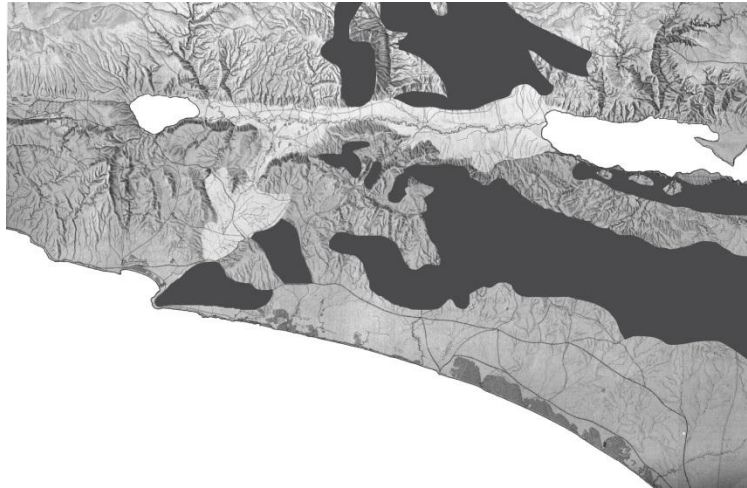


Figure 2.10: Cenomanian soft limestones and chalks (shaded areas)
 These thick deep beds of hard limestone make up the Samaritan and Ephraim Hills of the western highlands/escarpment and Lower Gilead, including the 'Arim slopes below the Madaba Plateau (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Cenomanian hard limestone breaks down into rich *Terra Rosa* soil. *Terra Rosa* is excellent for farming and especially well-suited for almonds, olives and grapes. Cenomanian limestone provide for quality building and tool material. Its thick deep layers are filled with cracks and fault lines allowing water to seep through and travel long distances underground to surface again in springs. Eroded cavities in this rock make good cisterns. Cenomanian limestone erodes into deep V-shaped valleys forcing communication routes along the ridges (Monson 1992; 2008:12-13, 24-25; Baly 1957:15-42).

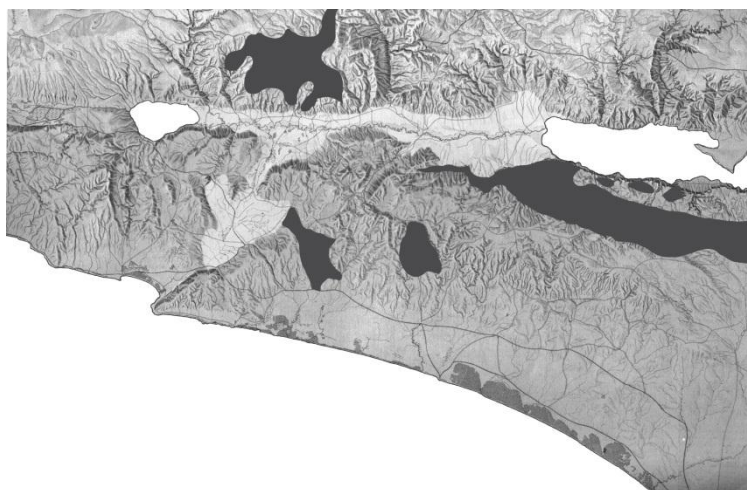


Figure 2.11: Senonian soft limestone and chalks (shaded areas)
 These shallow beds of soft limestone and chalks form the Wilderness area of the western highlands and central portion of Lower Gilead (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Senonian soft limestone breaks down into a poor, lime-rich soil called *Rendzina*.¹² *Rendzina* is limited for agricultural by itself but can be used for grains where it mixes with *Terra Rosa*. Natural scrub brush which is good for feeding herds of goats and sheep grows very well in *Rendzina*. Senonian limestone is an excellent resource for making plaster. Deposits of flint are common to its shallow thin layers providing raw material for tool making. These soft chalky beds easily erode and collapse making it a poor material for building or storing water. Where it has eroded away amongst outcrops of harder Cenomanian stone, it has created passes and routes through the highland ridges. Where it is in large fields (the Wilderness) it erodes into deep loose canyons that make travel difficult and dangerous (Monson 1992; 2008:12-13; 24-25; Baly 1957:15-42).

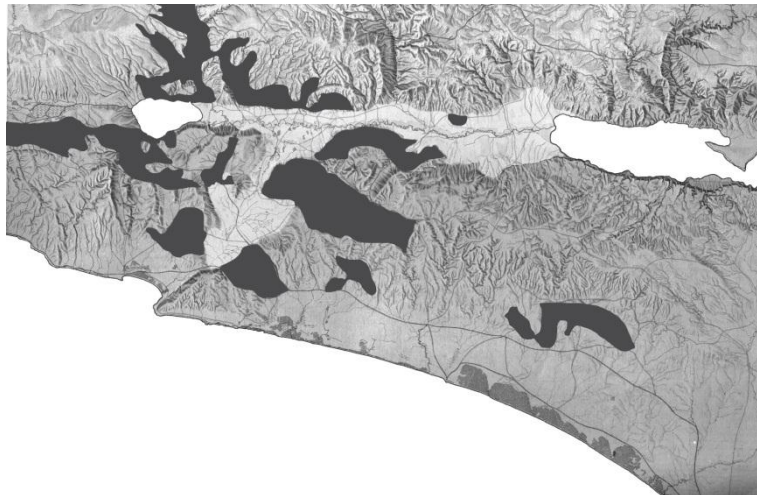


Figure 2.12: Eocene chalks mixed with very soft limestone (shaded area)
These soft chalks and limestone make up the escarpment of Lower Gilead and the Samarian Hills
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Eocene chalks break down into semi-productive Mediterranean Brown soil. It forms a hard nari crust but erodes easily once cracked and water penetrates it. Its weak load bearing capability limits its building use but it is good for plasters. Once water penetrates its nari crust, it easily percolates through the chalks and can travel a long

¹² Rendzina is a dark, grayish-brown, humus-rich soil. It is one of the soils most closely associated with bedrock and an example of initial stages of soil development. Soil of this type contains a significant amount of gravel and stones. Because the soils are shallow and stony, there is much semi-natural vegetation to be found in them.

distance to surface in weak springs. The softness of Eocene limestone and chalks make for easy digging especially for cisterns, that when plastered, are ideal for water storage. This rock erodes into a soft heavy alluvium leveling the ground and providing areas for easy movement (Monson 1992; 2008:12-13; 24-25; Baly 1957:15-42).

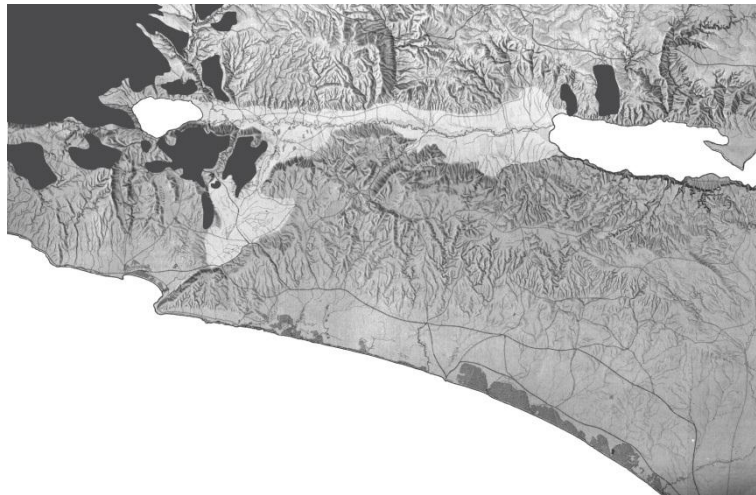


Figure 2.13: Latest period of volcanic flows (shaded areas)
Hard fields of basalt cover the Bashan and Golan and Lower Galilee. Volcanic cones are still visible on the Bashan and Damascus plateaus (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Basalt breaks down into a rich basaltic soil good for growing a wide range of crops as well as pastures for large herds. Its hard but workable characteristics allows for many uses as quality building and tool material. It is not permeable to water and allows percolation only through cracks which facilitates springs and pools. Although often on flat plateaus (by its nature of being formed by lava flows), it breaks up into large stones with sharp edges that confines travel to established, worn paths (cf. Monson 2008:24-25).

In the geological timeline, Cenomanian and then Senonian sediments were laid down on older Jurassic rocks. Towards the end of the Senonian periods, most of the geological movements of folding and drops occurred producing the faults, ridges (anticlines) and troughs/valleys (synclines) that make the terrain of known history. Then the later softer Eocene chalks and limestone filled in the synclines and volcanic action laid down basaltic flows. The majority of rocks surrounding the Jordan Valley

are sedimentary limestone and chawks of the Cenomanian, Senonian and Eocene periods.

The soils of the Jordan Valley were formed by the Lissan marl formation or from the alluvial material from the rocks of the surrounding highlands. The Lissan marl material comes from ancient lake sediments. This soil is made up of layered chawks and marls of calcite or aragonite and has both a high saline and alkaline content (Singer 2007:163).

Of the alluvial soils, the north is much more productive for agriculture. The soil has a *terra rosa* content from the basaltic rock of the Lower Galilee and Bashan (brought westward by the Yarmuk River) and is mixed with some Senonian *rendzina*. This rich soil disappears on the west side of the valley just south of Rehob in the middle of the Harod/Beth-shan valley opening. It continues further south on the eastern side until just opposite the southern wall of the Harod/Beth-shan opening. The southeastern erosion flow from the Jezreel Valley, via the Harod/Beth-shan valley and Gilead, brings a *rendzina* soil that dominates the Ghor (especially the eastern side) in the central and southern regions. The *rendzina* soil gets less fertile on the southern plains of the valley as Eocene chawks eroded from the wilderness begin to mix with the *rendzina* and more lissan marl is exposed by the more recent (geologically) exposure of the retreating ancient lake (Gomorra) whose remains make up the Dead Sea. This sterile marl (due to its high alkaline and salt levels) is what makes the Qattara longitudinal zone of the Jordan Valley. It begins being exposed by the eroding work of the Jordan Valley in the central/‘waist’ of the valley and widens as it goes south. In the third and deepest longitudinal zone, the Zor, the banks and flood plains of the Jordan River contain a mixture of *terra rosa* and *rendzina* soils washed down by the Jordan River (cf. Singer 2007:146-243).¹³

¹³ For a detailed chemical analysis of the soil of the Jordan Valley begin with Chapter 5 of Arie Singer’s *The Soils of Israel* (2007).

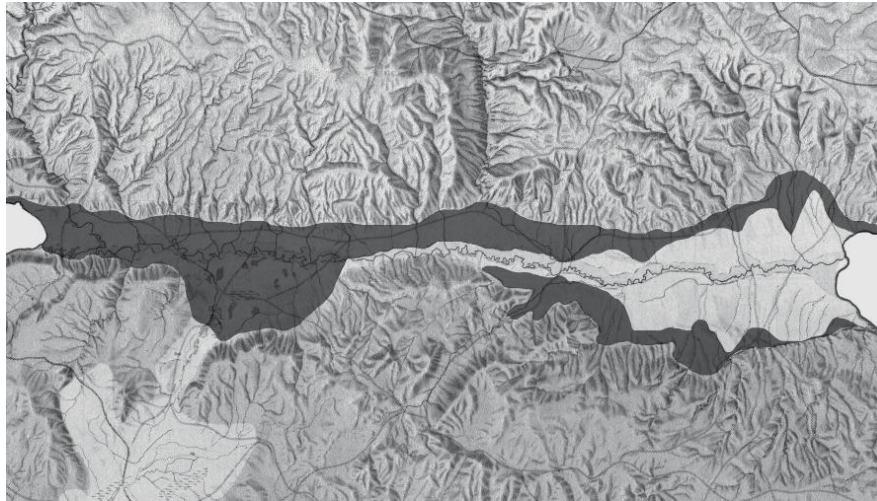


Figure 2.14: The alluvial pans of *terra rosa* and *rendzina* soils that are suitable for agriculture. The dark shaded area of the Jordan Valley represents the alluvial pans of *terra rosa* and *rendzina* soils that are suitable for agriculture. The process of alluvium being deposited by run off from the highlands via the various wadis is most evident in the south where this rich soil contrast with the sterile marl sediments that underlie the whole valley floor. Modern agriculture processes have extended some farming into the marl regions of the south. Ancient farming was limited to the zones above. The small band of rich soil lining the banks of the Jordan River in the Zor is not represented in the central and southern sections of this map. Historical references to the Zor describe it has a dense jungle of brush and was to be avoided (section 2.2.2.3.3). However, if cleared, it provides small rich fields for farming. Today, the Zor of the central region has very productive small scale farms. Several Tells in the Zor or on the edge of the Zor/Qattara may suggest some areas of the Zor were cultivated in ancient times (i.e. Tells Damiyeh, Damiyeh Jadideh, Abu Nijrah...) (section 2.3.1.1.2) (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

2.2.2.3 Key zones of the Jordan Valley

The Jordan Valley has three distinct geographical and geological zones along its longitudinal axis: the Ghor, Qattara and Zor. Each is marked by a different type of soil, landscape and accessibility. One of the few places one can easily access/experience (due to modern politics and restrictive military zones of the valley) all three longitudinal zones today are on the Jordanian side of the valley at the Maqdas (baptismal site). Starting in the Ghor at 'Tell Elijah' surrounded by agricultural fields, one can drive or hike through the desolate Qattara, dropping down over 30 meters (100 feet) of its white chalky cliffs onto the flood plains of the Jordan River. Hikes from the river banks to the ruins of the Byzantine church of 'Mary the Copti' go through some of the dense thickets and brush of the Zor.



Figure 2.15: Eastern perspective
Looking east: The green Zor along the banks of the Jordan River, the eroded sterile cliffs of the Qattara, distant agricultural fields of the Ghor before the escarpment of Upper Gilead
(Photo: <http://www.biblewalks.com/sites/AdamBridge.html> Accessed on October 12, 2011).

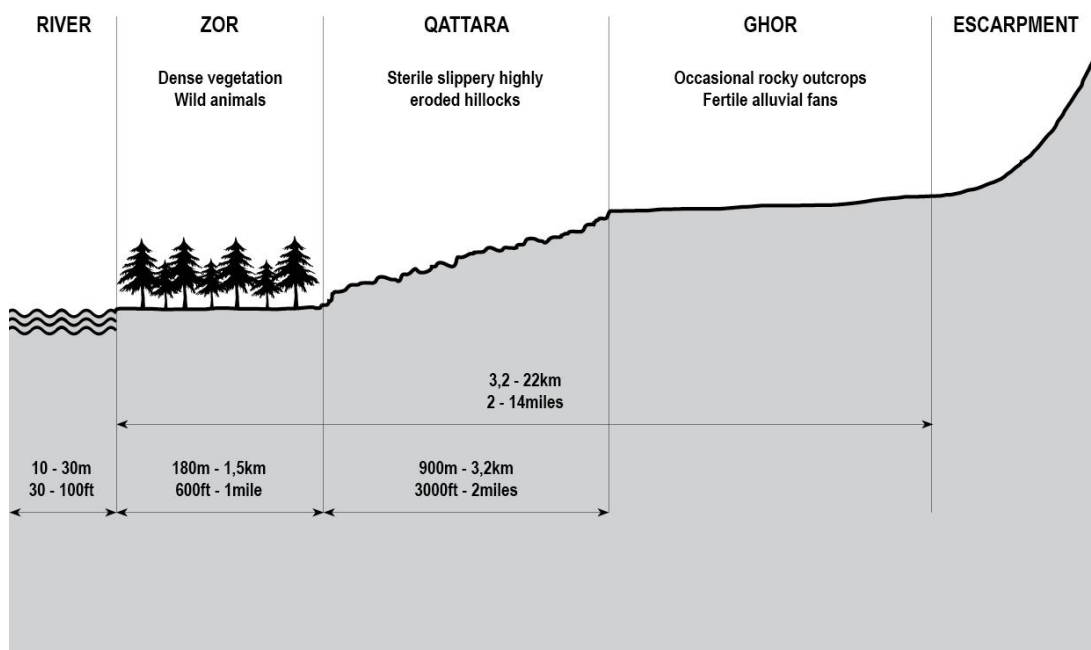


Figure 2.16: The three longitudinal zones of the valley floor
(Illustration: J.M. Schaaf 2011)

2.2.2.3.1 The Ghor

The Ghor (the depression) is both the general Arabic term for the Jordan Valley as a whole and the specific valley floor running between the eastern and western escarpments to the sterile clay/gypsum marl of the Qattara. It is generally flat and easy to travel on, crossing a few east-west ridges as small hills and bisected by a few

rivers with no historical references of presenting an obstacle to ford. The alluvial soil from the highlands covers the sterile sediments of the ancient lake. These soils are deepest at the alluvial fans created by the rivers and wadis as well as in the north section of valley. Where water is present, either by rain in the north or along the rivers and springs, agricultural crops, especially grains and vegetables, grow well (cf. Smith 1974:53-63, 286-291).

2.2.2.3.2 The Qattara

The Qattara is exposed sediment of clay and gypsum. Its high saline and alkaline content make it an agricultural wasteland, often called the 'bad lands' of the Jordan Valley. It forms a very soft slippery surface. Erosion has caused deep impassable east-west ravines that push all north-south traffic up to the Ghor (Rasmussen 2010:61). The Qattara starts in the central region of the valley and extends south. It ranges from 805 meters (half a mile) to 3.2 kilometers (2 miles) wide. On the western side of the Jordan River just above where the Jabbok/Zerqa River enters, the soft Qattara cliffs are right alongside the Jordan River. Erosion and earthquakes occasionally cause parts of the cliff to fall. Since the 12th century AD there are at least six references to the Jordan River being dammed (sometimes for several days) due to landslides caused by earthquakes; in 1160, 1267, 1534 or 1546/47 (for two days), 1834, 1906 (for ten hours) and 1927 (twenty hours). The best documented are the 1534 or 1546/47 and 1906 by the Ottoman administration and the 1927 damming that occurred under the British mandate (Schattner 1962:55; Garstrung 1931:137) (see Figure 2.32).

2.2.2.3.3 The Zor

Within the Qattar lies another deeper, narrower valley that contains the actual Jordan River. In some places (near the Maqtas [baptismal site] in Jordan) it is 46 meters (150 feet) deeper than the Qattar and widens from 200 meters (600 feet) to 1.7 kilometers (5000 feet) (Smith 1974:321). Its banks are white marl with dense growth of tamarisks and tangled bush. The use of the Zor depends on the stage of the river. In the last fifty years, as the Jordan River has been greatly reduced by the surrounding nations' water management policies, several large areas of the Zor have

opened up for agricultural use as the river has receded and rich alluvial soil from the north is exposed on the river's banks and flood plain. Prior to the past one hundred years, the Jordan River was much larger and wilder (see 2.2.2.6.1). In the time of Israel's prophets, this rich soil and water supply allowed for a dense growth of tamarisk trees and tangled bush. This dense brush within the Zor is referred to as the 'Jungle of the Jordan' or the 'Pride of the Jordan' and is often a symbol of danger or trouble:

'If you stumble in safe country, how will you manage in the thickets by the Jordan?' (Jeremiah 12:5).

'One will come up like a lion from the thickets of the Jordan' (Jeremiah 49:19; 50:44).

'Listen to the roar of the lions; the lush thicket of the Jordan is ruined!' (Zechariah 11:3).

Throughout history, the Zor has been a wild impassable zone. Fords across the river required not only shallow points to cross but breaks in the Zor in order to continue east-west through the Qattar with its many ravines to the flat north-south routes of the Ghor. The depth of the Zor below the level of the Ghor in the central and southern parts of the valley negated the use of the Jordan River as a source of irrigation water for these parts of the valley.

One late 19th century traveler described the Zor as

[C]lose to the river's bank we descend fifty-five feet into a dense thicket of tamarisk, silver poplar, willows, terebinth, and many other trees strange to European eyes, with a dense and impenetrable undergrowth of reed and all sorts of aquatic brushwood. This is perforated in all directions by the runs of wild boars, which literally swarm here, while the branches are vocal with myriads of birds—nightingales, bulbuls, and especially turtle-doves—which meet here and find abundant food in the herbage of the trefoil, astragalus, and other characteristic plants of the higher plain. In ancient times beasts more formidable than the wild boar had their lair in these coverts, and when driven out by the periodical swellings of Jordan the lion and the leopard sought their prey among the flocks of the villagers in the country above. The leopard still lingers in these thickets, and an observant traveller cannot explore far without coming on its traces, especially on the east bank. But the lion, though not extinct in the times of the Crusades, has long been exterminated from the region west of the Euphrates (Wilson 1881:164-165).

2.2.2.4 Ridges and valleys bordering the Jordan Valley

The wadis and ridges of the escarpments that were created by geological movement and erosions have a great influence on the Jordan Valley. They not only bring down water and alluvium, making the valley floor suitable for farming, but they create the pathways for east-west travel between the highlands and the international highways. Certain wadis play a critical role in the human settlement of the region. Large settlement sites are found at the mouth of key wadis. The availability of water, rich farmland and access to trade routes made these locations very conducive for living and wielding political and economic influence. There are innumerable small wadis on each side of the escarpment. This section will only examine the larger ones and those that appear in the ancient literature (Chapter 3).

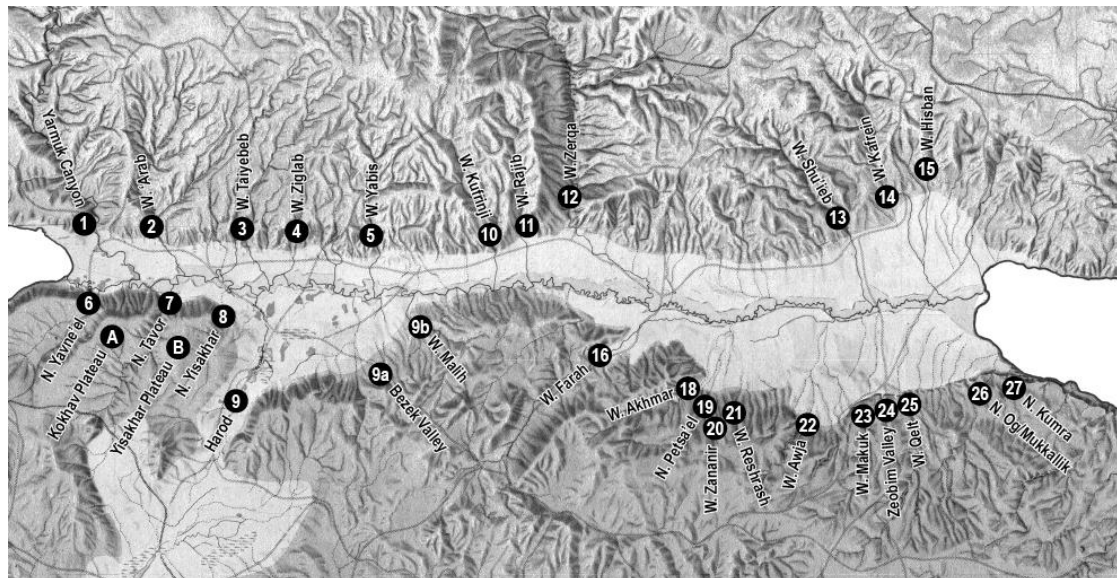


Figure 2.17: The primary wadis/nahals of the valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

2.2.2.4.1 The Northern Jordan Valley

The northern section of the valley has thirteen key wadis/nahals. On the eastern escarpment is the Yarmuk, 'Arab, Taiyebbeh, Ziglab and Yabis. On the western side is the Yavne'el, Tavor, Yisakhar, Harod, Bezek and Malih (see Figure 2.18).

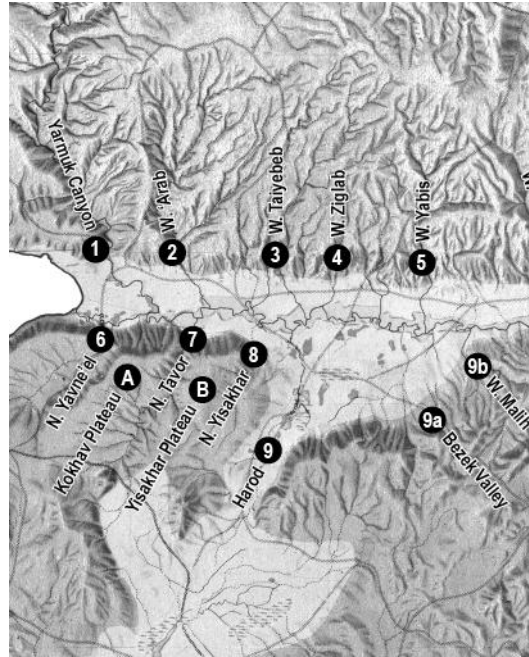


Figure 2.18: The main wadis/nahals of the northern valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

The Yarmuk Canyon drains the plains of Bashan and northern section of Lower Gilead. The river creates a rich alluvial plain into the Jordan Valley. This alluvial plain creates flat agricultural fields and a natural dam that pushes the Jordan River to the west side of the valley. The river canyon and side wadi's steep cliffs create a large barrier pushing north-south traffic to the east. All east-west traffic from the northern section of the valley must move northeast or southeast along the ridges through the Golan and Lower Gilead to the Bashan and the eastern plateau. The canyon is too deep and narrow to provide a transportation/communication route east-west. The main impact of the Yarmuk River canyon on the valley is: the amount of water the Yarmuk River adds to the valley (see 2.2.2.6.1 and Table 2.6), the large alluvial plain it has deposited providing agricultural potential, and a large triangular transportation/communication 'dead zone' to all but local traffic starting at the river's mouth and expanding east.

Wadi 'Arab: The first break in the eastern escarpment south of the Yarmuk River is Wadi 'Arab. The water flow from 'Ain Massil and other springs is stopped by a modern dam but probably held a perennial flow in ancient times (see Table 2.7 on 1950s water flow). Today, the opening of this valley carries the modern highway from the Jordan Valley up to Irbid. Although extensive excavations were required to

allow the modern road to move to the southern ridge of the Wadi, one can still take a partially paved side road before the main road excavations just north of the dam that winds up a series of ridges that lead both north-east to Um Qeis (Gadara) and east to Irbid. Near the branching of these ridges is the large Bronze Age site of Zera (no. 100 Figure 2.37). Between the Yarmuk Canyon and Wadi 'Arab is a traversable ridge that leads from the valley floor to Um' Quies (Gadara of the Decapolis) (see route C section 2.3.2.2.2).



Figure 2.19: The Wadi 'Arab from Tell Zer'ah (no. 100 Figure 2.37) looking east towards the plateau. The modern dam blocks the descent to the valley. The modern road to Irbid follows the ridge route just to the south (possible route C Figure 2.44) (Photo taken by J.M. Schaaf. Reproduced by kind permission of J.M. Schaaf).

Wadis Taiyebah, Ziqlab and Yabis are three deeply eroded wadis of Lower Gilead. The Wadi Taiyebah is a deep sharp wadi running due east for 15 kilometers (9 miles). Its deep walls limit travel and provide fast flowing runoff during the rainy season of the eastern highlands. The Wadi Ziqlab drains enough water to be dammed in modern times. In the late 1950s early 1960s, before Jordan's big population growth on the eastern plateau, the Wadi Ziqlab and Yabis had an estimated water flow of 32 million m³ per annum (see Table 2.6) (Schattner 1962:24-35). The Wadi Yabis today has a perennial stream in it, but not enough to dam. The eroded path of a much larger stream flowing from the Wadi Yabis joins an older river bed from the smaller

impassable wadi immediately south. This old stream bed has carved a clear path through the Ghor into the Zor but does not appear to have been a large obstacle to foot traffic. A narrow walking trail along the Wadi Yabis ascends from the Ghor up into the green valleys of the Ajlun area. A larger easier route exists on the ridge 2 kilometers (1.2 miles) to the north and just south of Pella (which now has a small modern tarred road) ascends the escarpment of the Ajlun hills as well. Ridges on both sides of the Wadi Ziqlab provide local routes from the valley floor into the highlands (see Routes D, E and F of 2.3.2.2.2.).

The western escarpment between the Sea of Galilee and the Beth-shan Valley averages between 396 meters (1300 feet) and 510 meters (1670 feet) above the valley floor (Google Earth). Between the Sea of Galilee and the northern edge of the Kokhav Plateau there is a 5.5 kilometers (3.4 miles) break where the Jordan Valley is separated from the western plains of the Sea of Galilee by a small rounded ridge rising on the average only 213 meters (700 feet) from the valley floor. The southern end of this low ridge is broken by the Nahal Yavne'el (a perennial water source). Several routes up this small ridge and along the western shore of the lake give access to the Lower Galilee towards the strategic Goloni Junction south of the Horns of Hittim (see Route G of 2.3.2.2.2). The Kokhav Plateau begins along this northern section of the western escarpment.

Two more nahals (wadis) flow into the valley from the eastern Galilee, Nahal Tavor (Wadi Bira) and Nahal Yisakhar. These two nahals are also perennial water sources bringing fertile alluvium from the basaltic rock and soil above. The Nahal Tavor divides this section of the escarpment in half and separates the highlands above into the Kokhav (north side) and Yisakhar (south side) Plateaus. The ridges on each side of this nahal provide a gentle slope to enter and exit the valley (see Routes H and I of 2.3.2.2.2). Although both of these Galilean plateaus have western access to main transportation routes, the broken terrain of the eastern Galilee and its proximity to the Beth-shan gateway probably limited these routes to only local significance. The south side of the Nahal Yisakhar begins the descent of the eastern Galilee escarpment into the opening of Beth-shan/Harod Valley.

The Harod Valley/Beth-shan Valley is the widest and most easily traversed entrance into the Jordan Valley (Figure 2.4). This entrance point is in close proximity to the international coastal highway connecting the Jordan Valley to the north-south traffic, to western Mediterranean ports via Akko and making the northern Jordan Valley a crossing point to the eastern highlands.

The Harod/Beth-shan Valley is one of the most fertile areas in the region. At its widest it is twenty kilometers. It has many springs flowing from fissures in the hard limestone mountains of Gilboa. The valley is a funnel shape, gently descending valley connecting the Jezreel Valley to the Jordan Valley. The elevation at the Harod Spring where the Harod and Jezreel Valleys meet is sea level (the Harod River is -145 meters (-476 feet) as it passes Tell Beth-shan 15 kilometers (9.3 miles) down river. The Jordan River 5.5 kilometers (3.4 miles) further east is at an elevation of -259 meters (-850 feet). There is no real technical border between the Harod and Jordan Valleys. Both valleys come together on a widening plain from the Jordan's north-south access and the Harod's east-west access forming a rich fertile plain and a political/economic strategic gateway. Without a clear border between these two valleys, this thesis follows a general line of the north-south western escarpment, bulging to the west to include Tell Beth-shan and Tell Sarum (Rehob) and their surrounding fields as a border for the Jordan-Beth-shan/Harod Valleys.

From the south west corner of Jordan/Beth-shan Valley, there are two small valley/ridge routes (routes L and M section 2.3.2.2.2.) connecting the western highland north-south ridge route to the Jordan-Beth-shan Valley. The first is five kilometers southwest of Tell Rehob up the Bezek Valley (N. Bezek). The modern highway 667 follows this route. This route ascends the Gilbo'ah Mountains in a western direction where it then intersects the western highland north-south ridge route. The second is ten kilometers from Tell Rehob due south, near the modern town of Mekhola, ascending the escarpment southwest toward Shechem. The modern highway 578 follows this route up the initial ascent before branching off into

several options towards Shechem and the main north-south ridge route (Israel 1996).¹⁴

2.2.2.4.2 The Central Jordan Valley, 'The Waist'

The narrow 'waist of the central valley has four key wadis. On the east is the Kufrinji, Rajib and Zerqa (Jabbok). On the west is the Farah.

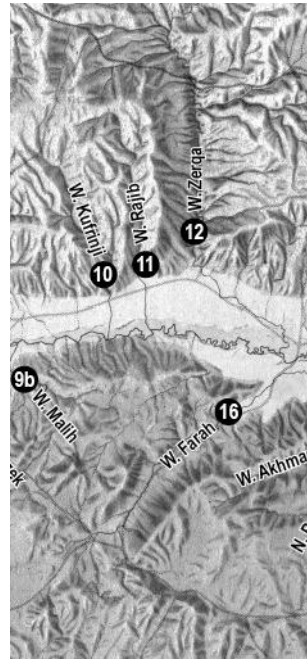


Figure 2.20: Key wadis of the central valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

Wadis Kufrinji and Rajib: Heading south, just 8 kilometers (5 miles) and 5 kilometers (3 miles) before reaching the Jabbok/Zerqa River canyon are the Wadis Kufrinji and Rajib. These two steeply eroded wadis, along with Wadi Yabis, drain most of Upper Gilead although today, their flow is reduced to a small trickle that disappears quickly upon reaching the Ghor. An eroded stream bed can easily be traced to the Zor. As one walks around the mouths of these wadis, you can easily see the remains of Ottoman and Byzantine mills that attest to a larger and more consistent water flow in the past. The stream bed exiting the Wadi Kufrinji can be traced along a path that

¹⁴ For a detailed study of the Harod Valley that includes some encroachment to areas around Beth-shan and Rehov, see Inbar's 2001 Ph.D. thesis, 'The Geographical History of Beth-shean Valley and its Adjacent Mountainous Area: From Late Bronze IIb to end of Iron IIc Periods'.

leads it adjacent to Tell Sa'idiyeh. Although this stream bed runs as close as 70 meters (230 feet) to the Tell, the Bronze Age residents went to great lengths to build a covered well system within the city walls.¹⁵ The ridge between Wadi Kufrinji and Rujib provides a clear but steep route up the escarpment into the forests of Upper Gilead (Route N section 2.3.2.2.3). The modern road number 20 follows this ridge route.



Figure 2.21: The mouth of the Wadi Kufrinji and Rajib
(Photo taken by J.M. Schaaf. Reproduced by kind permission of J.M. Schaaf).

The Wadi Zerqa/Jabbok is 6 kilometers (3.7 miles) to the south of the Kufrinji/Rujib ridge provides a larger more gradual and direct ascent through the highlands and out to the eastern north-south throughway. This appears to be the major transport/communication route of the central valley. The wadi is a major obstacle to north-south traffic. The Jabbok/Zerqa River has a large drainage area starting in Amman, traveling northeast before rounding back to the west and descending to the Ghor. The Jabbok/Zerqa River is perennial and has created a large alluvial pan across the wide wadi mouth and widening even further as it spreads out into the Ghor. Today, the Zerqa River hugs the south side of the wadi mouth and runs southwest for 13 kilometers (8 miles) before reaching the Jordan River. The wadi extends over 30 kilometers (19 miles) to the east, beyond the eastern extension of all the other wadis except the Yarmuk Canyon, providing access to the eastern plateau and

¹⁵ Several references to eroded stream beds coming out of the eastern wadis are made in this section. It should be noted that water flow from these wadis creating the alluvial pans would change over time in accordance with their flow and depositing of alluvium. Today's eroded stream beds, even if a few hundred years old, may not be the course of the water during the Late Bronze Age. In the ancient sources examined, only the Jordan River is noted as an obstacle to transverse (Papyrus Anastasi I). This research found only one archaeological study making reference to the Late Bronze Age stream beds being different from today's.

several north-south transportation routes. 5 kilometers (3 miles) up the wadi from the Ghor, just east of Tell edh-Dhahab (no. 149 Figures 2.37 and 2.40 possible Mahanaim/Penuel), a ridge runs southeast providing relatively easy access into southern Gilead Zia region. A further 5 kilometers (3 miles) east from Tell edh-Dhabab, a side wadi, wadi Um ed-Dananir, and its ridge route provides a second more gradual south-east route onto the eastern plateau towards Ammon and the Baq'aa Valley (Route O section 2.3.2.2.3).



Figure 2.22: The Wadi Jabbok, about five kilometers up looking west
(Photo taken by J.M. Schaaf. Reproduced by kind permission of J.M. Schaaf)

Wadi Farah: After heading south through the narrow waist of the Jordan Valley, the next western entrance is the Wadi Farah. The Wadi Farah has a wide alluvial plain as it opens up into the Jordan Valley. It gradually ascends from -300 meters (-1000 feet) at the valley floor to sea level 25 kilometers (15 miles) up the escarpment where it meets the main north-south central ridge route of the western highlands eight kilometers north of Shechem and its junctions with routes to the coastal plain. The modern highway 57 follows this valley route (Israel 1996:21, 25). This wadi provides the central western highlands access to the Jordan Valley (Route S section 2.3.2.2.3) near the fords of the Jordan River. The alluvial fan of this wadi is the largest of four in the southern west section that allows for agriculture and settlements along the escarpment base.

2.2.2.4.3 The Southern Jordan Valley

Most of the valley floor in this widest section of the valley consists of poor saline soils and lissan not suitable for agriculture, but wadis on each side of the valley provide alluvial fans and waters allowing supporting settlements along the base of

the escarpments. The eastern escarpment has three main wadis; the *Shu'ieb*, *Kafrien* and *Hisban*. The west side has a maze of smaller wadis; the *Akhmar*, *Petsa'el*, *Zananir*, *Reshrash*, *Awja*, *Makuk*, *Zeobim*, *Qelt*, *Og* and *Kumra*.

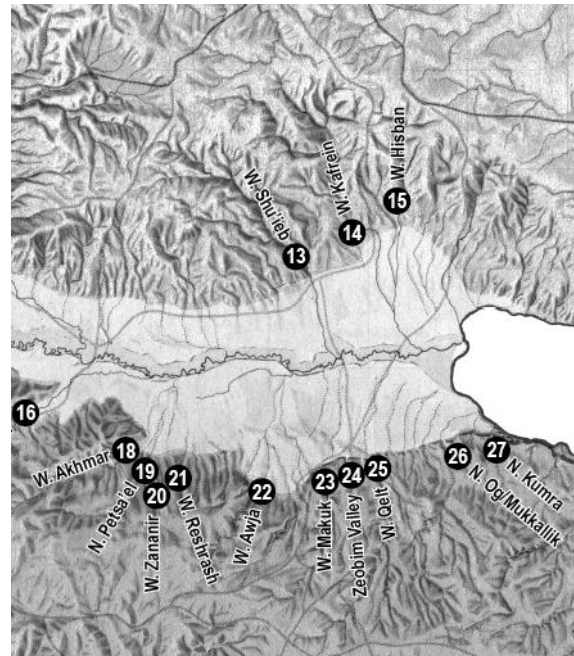


Figure 2.23: Key wadis of the southern valley
(Photo taken by J.M. Schaaf. Reproduced by kind permission of J.M. Schaaf)

Wadis Shu'eib, Kafrein and Hisban: As the eastern escarpment retreats, opening up the Ghor into the Plains of Moab, three wadis open up into the plain. The most northern, Wadi Shu'eib is a narrow steep walled wadi that runs northeast. As it nears modern el-Fuheis, 12 kilometers (7.5 miles) from the Ghor, a sharp escarpment forces travelers (route P section 2.3.2.2.4) onto the ridge north towards Salt where further eastern movement will intersect with the more accessible routes coming out of the Wadi Jabbok/Zerqa. The wadi continues over the sharp ridge widening into a basin that forces north-south traffic another 8 kilometers (5 miles) further east. The wadi is a perennial river providing water and rich alluvium to the Plains of Moab. The ridge routes were probably relegated to only local significance, but they did provide access through a small 'back door' to the routes rising out of the Wadi Jabbok.

Both Wadi Kafrien and Wadi Hisban have perennial streams from springs and drainage high on the escarpment. Erosion from both streams has contributed to making the alluvial pan of the Plains of Moab suitable for agriculture. The more

productive soil is closer to the wadi mouths as the alluvial pan spreads out and gets shallower towards the west before giving way to the sterile marls of the Qattara. The Kafrien provides a gradual ascent up to the eastern plateau towards Amman (Route Q section 2.3.2.2.4), arriving on the plateau between modern Wadi Siir and Na'ur. However, from modern times back to the Romans and probably earlier, the broad ridge between Wadi Kafrein and Hisbon (Route R section 2.3.2.2.4) seems to be the route of choice as it provides a gradual 18 kilometers ascent up to Na'ur with its crossroad to Amman, the Madaba Plateau and the main north-south highway. Wadi Hisbon is too narrow and steep to provide any route up the escarpment. The ridge, 4 kilometers (2.5 miles) west of Wadi Hisbon's mouth, marked by both the modern tar road and remnants of a Roman road, traces a ridge route south and then southeast arriving on the Madaba plateau between ain Musa and mount Nebo. All three of these wadis and their ridges provide water, fertile alluvium and routes from the eastern plateau onto the Plains of Moab from the northeast, east and southeast.

Together these wadis coming out of the escarpment arc running from the ridges of the Wadi Shu'eib to southern ridges past the Wadi Hisbon encompassing the 'Plains of Moab' are called the 'The Slopes of Pisgah,' in the Bible (Deuteronomy 3:16-17; 4:48-49; Joshua 12:2-3 and 13:15,20). These slopes were allotted to the tribes of Gad and Reuben and became the frontier of Ammon. Besides being a critical watershed for the above three wadis that nourish the plain and settlements below, they give the most direct access to the Madaba Plateau and Ammonite territory for the people of the Southern Jordan Valley and Judean highlands.

Wadis el-Akhmar, Nakhal Petsa'el, Wadi Zenanir and Wadi Reshrash: As the valley begins to widen around the modern towns of Fatsa'el and Gilgal, the broad western indentation of the valley floor is referred to as the Wadi El-Malaha. The Wadi Malah runs southeast along the valley floor towards into the Jordan River (Figure 2.35). It gathers the drainage of two groups of smaller nahals that have eroded steep wadis into the escarpment, joining together on the valley floor to create the rich alluvial pan and the Wadi El-Malaha. The northern group is the most important with the rich springs of Fazeal (Phasaelis) and consists of Wadi el-Akhmar, Nakhal Petsa'el, Wadi Zenanir and Wadi Reshrash. Each provides small steep ridge routes up into the hills

of Ephraim and the north-south ridge route (Route T section 2.3.2.2.4). Although the modern 505 highway follows the ridge between Wadi el-Akhmar and Nakhal Petsa'el, in ancient times these routes without modern excavation would be limited to local traffic. The southern group consisting of Wadi Dalya and Wadi el-Baqar has also helped to create a rich alluvial pan at the foot of the western escarpment. These two wadis end abruptly and do not provide easy access to the top of the escarpment (Israel 1996:24-25; Monson & Lancaster 2008:4-5).

Wadi el-Awja: Although this wadi and its ridges fall short in providing access up the western escarpment, its perennial springs have created a small but rich alluvial pan on the Ghor. Today, the modern town of Uja Atahta exploits these productive farmlands.

Wadis Makuk, Zeobim and Qelt: From the Plain of Jericho, rich alluvium has been washed into the Ghor from Wadi Makuk, the Zeobim Valley and Wadi Qelt. Both the Wadi Makuk and Qelt (routes U and V section 2.3.2.2.4) provide transportation routes into the western highlands. The Wadi Makuk provides several ridge routes up the western ascent to the main north-south ridge route and the strategic Central Benjamin Plateau. One route (U), along the shallow Zeboim Valley goes directly to Bethel through the area of Khirbet Maqatir. The Wadi Qelt with its sharp steep sides provides a small but direct route to Jerusalem.¹⁶

From the Wilderness - Nahal Og and Kumra: From the Judean Wilderness, the steep rolling hills are broken by the Nahal Og and Kumran. Erosion from the sterile soil of the Wilderness adds little to the valley floor at the southwest corner of the valley. The Nahal Og (Wadi Mukkallik) provides a difficult but passable series of ridges up Har Montar to Bethlehem. This route would be limited to all but local traffic due to its isolation and the option of more northern routes from the central north-south ridge routes through the western highlands.

¹⁶ The modern Highway 1, which most travelers take from Jericho to Jerusalem today, does not follow a complete natural ridge/valley route between the valley floor and the Wadi Qelt junction but relies on modern excavation/construction techniques.

2.2.2.5 Climate

Knowledge of the Late Bronze Age climate of the Jordan Valley and the Levant is vague and incomplete. Individual studies often conflict with each other. Studies by Van Zeist (1982, 1985) and Horowitz (1971, 1979) based on vegetation and pollen counts in the Huleh Valley and the Sea of Galilee sediments conclude that the climatic conditions from 3000 BC to the present have changed little. The change in flora and fauna over this period is due to human activity. A study by Neeve and Emery (1967), cited by Crown (1972:312-330), analyzed the runoff/evaporation ratios of the Dead Sea. They concluded that, starting around 2300 BC, a period of increased participation began, slowly tapering off until it stabilized around the year 0 (cf. Neeve & Emery 1967; Van der Steen 2004:27).

Other studies (Shehadeh 1985; Strange 2008:284; Rose 1995) based on the comparison of archaeological remains of agricultural production to other periods and a shift of settlement patterns towards well dependence, conclude that the Late Bronze Age Canaan was much drier and 2-3 degrees Celsius warmer than today. Stiebing adds to this position by reporting that tree ring samples from the Negev show a series of narrow growing periods indicating less precipitation between 1300 and 1000 BC in the Levant (Stiebing 1989:186). Shehadeh states that the dry spell reached its maximum between 1800 and 1300 BC and, by 1000 BC; rainfall became more or less equivalent to the rainfall of the 20th century AD (Shehadeh 1985:27; MacDonald 2000:33-34).

Neumann and Parpola even concluded that a relatively cooler period started in 1500 BC and lasted until 1200 BC for the whole Mesopotamia region (cf. Neumann and Parpola 1987:161-182).

The position that the climate during the 300 years of the Late Bronze Age was similar to today's appears the most likely. Just like the patterns of the past 150 years, there were probably periods of drought that lasted years, if not decades. Temperatures and humidity are also expected to have been the same as today. The amount of rain in the valley would not vary much as most of the Jordan Valley is in the rain shadow of the western highlands. Any decrease in rain would have affected the eastern

highlands the most and impact the amount of water runoff from the highland watersheds. Water levels of the various rivers and springs have lowered dramatically in the last 50 years due to human activity and will be covered in section 2.2.2.6.

At the close of Late Bronze Age, several 19th Dynasty Egyptian records refer to drought conditions in the Sinai and a food crisis in northern Mesopotamia. Egyptian border guards allowed Shasu nomads from the Sinai to enter the Nile Delta in search of food:

We have completed the transfer of the Shasu tribes of 'Aduma past the fortress Merneptah-hotepher-Ma'at ... which is in Seku to the pools of Per-Atum of Merneptah-hotep-her-Ma'at ..., which are in Seku, in order to keep them alive and in order to keep their cattle alive (Papyrus Anastasi VI, ANET 1955:259).

The scribe Erinna greets his master, the treasury scribe Ka-ga[b...]. This is a dispatch for [my master's] information ... we have finished admitting the shasu tribes of Edom [through] the fortress of Merneptah-hotpe-hi-ma'at which is [in] Tjekku to the water holes of the house of Atum-of-Merneptah-hotpe-hi-ma'at which [are in] Tjekku, for their own subsistence and to that of their flocks, by the great Ku of Pharaoh, the good sun of every land! In the year 8, epagomenal days, [birth of] Seth. I have had sent a columned document to the [place where] my master is with the other specific days on which the fortress may be passed (P. Anast. VI, 4:11-5:5; translated by Goedicke 1987:83-98).

On a larger global scale, the reign of Merneptah, as well as the final years of his father Ramesses II's reign, was filled with concern for cereal shipments for the northern Levant (Singer 1999:714-716). Correspondence immediately after the peace treaty between Egypt and Hatti by Ramesses II are full of requests for Egyptian grain. Hatti, Mugish and Ugarit each seem to have had the same need (Singer 1999:714-716). At the end of Late Bronze Age and Dynasty XIX of Egypt, there seemed to be a food crisis throughout the Levant including Canaan. Egypt appeared to have responded with relief supplies to the north. Merneptah declared: 'It was to keep alive this land of Hatti that I caused grain to be taken in ships' (Kitchen 1969: 5 line 3). In the southern Levant, Egypt expressed at least a minimum act of charity by allowing the movement of the Shasu from Edom in the Transjordan through military checkpoints in search of sustenance. However, in the earlier Amarna period, all

references to agriculture disruption and the 'inability' to send tribute to Egypt are blamed on political strife, and not climatic conditions:

Say to the k[in]g, [my lo]r[d], my [Sun]: Message of Šum-Add[a], the serva[nt o]f the king, my lord. I fall at the feet of the king, my lord, 7 times and 7 times. As to the king, my lord's, having written for grain ..., it has been destroyed. May the king, my lord, ask his commissioners whether our ancestors, since the days of Kusuna, our ancestor, always shipped [grain] (EA 224 translated by Moran [1992]).

In fact, the various leaders of Canaan assure Pharaoh that they have plenty of grain for the Egyptian army when it arrives as well as to export:

Say to the king, my lord, my Sun, my god: Message of when it arrives serva[nt o]f the king, my lord. I fall at the feet of the king, my lord, 7 times and 7 times. As to the king, my lord's, having written for grain ..., it has been destroyed. May the king[y l]ord. May the god of the king, my lord, grant that the king, my lord, come forth along with his large army and learn about his lands. I have indeed prepared accordingly abundant supplies: before the arrival of a large army of the king, my lord (EA 337 translated by Moran [1992]).

Now, my brother, ... May the ships be many, send (them) here ... they have prepared much ...Grain [in] ships from the province of Canaan [send to me as in] former [days], so that I may make bread [...]' (EA 36 translated by Moran [1992]).

2.2.2.5.1 Rain and temperatures

The climate's yearly cycle for the region offers a dry, stable summer (June to September), a fall transition to the rains where clouds begin to show with a few light showers (October to November), the winter rainy season (December to March), and a spring transition back to the dry summer (April to May).

The winter rains, southern tails of storms crossing Europe, approach from the west, sweep inland, drop rain on the western heights, descend into the rain shadow of the rift valley and then drop their remaining moisture on the eastern heights. Western storms have greater erosional effect on the western slopes and have advanced the watershed eastward; hence, differences exist between surface and underground drainage systems. Water seeping into the underground system may flow eastward to reappear in eastern springs such as Ain Sultan in Jericho (cf. Rainey & Notley 2006:41-42; Monson & Lancaster 2008:24).

The Jordan Valley does not have a uniform climate. Temperatures and rainfall change dramatically between the northern, central and southern sections. The amount of precipitation in the valley decreases as one moves south. Taking the mean annual precipitation records from the last century, the average rainfall of the three divisions of the Jordan Valley (taken from Israeli and Jordanian records recorded in Schattner 1962:21-24; Van der Steen 2004:20-21 and Wilson & Wozab 1954) are:

- northern section 400 mm (Deganya at the exit of the Jordan from the Sea of Galilee: 373 mm);
- central section 300 mm (Tirat Tsevi: 293 mm);
- southern section 100 mm (Allenby Bridge: 118 mm).

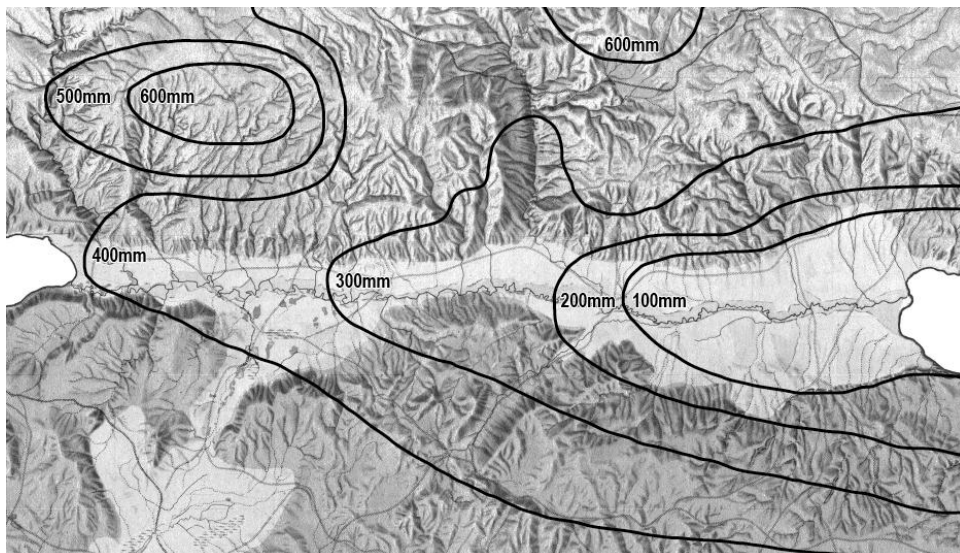


Figure 2.24: Rainfall boundaries
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

The average days of precipitation of over 1 mm follows a similar pattern:

- In the north, 50 days (Deganya: 52);
- The central region, 40 days (Tirat Tsevi: 43).
- In the south, 30 days (Allenby Bridge: 30; at the mouth of the Dead Sea: 15 days).

The variations from the mean can vary as much as 60%. In a 'wet' year precipitation in the north can reach 650 mm and 250 mm in the south. In a 'dry' year the north

may receive only 200 mm and the south 60 mm). The low humidity levels in the south compound the effects of low precipitation. The average annual humidity in Jericho is 49%. In the months of May-July, the average is 27% (which makes for an evaporation rate of 10.3 mm a day). In the winter months of January-February, humidity averages 49% (Jericho's humidity may be higher than the rest of the southern section due to its large spring and heavily cultivated fields) (Schattner 1962:21-24; cf. Van der Steen 2004:20-21; Wilson and Wozab 1954).

Temperatures in the northern section (Beth-shan) average 29°C (84°F) in the summer and 14°C (57°F) in the winter. Average temperatures in the south (Jericho) are 33°C (91°F) in the summer and 15°C (59°F) in the winter. However, both sections have registered regular temperatures of 39°C (102°F) (Beth-shan) and 41°C (106°F) (Jericho) in August (<http://www.levoyageur.net/weather-city-jericho> and [city-beth-shan](http://www.city-beth-shan) - accessed August 22 2011). Some of the highest recorded temperatures in the world have been recorded at Jericho (50.5°C [123°F]) and Tirat Tsevi (54°C [129°F]) on 21 June 1942 (Schattner 1962:22 and <http://www.ims.gov.il/IMSEng/CLIMATE/TopClimetIsrael> - August 22 2011) (cf. Baly 1957 Chapter 5).

Table 2.3: The Meteorological Department of Jordan's Ministry of Transport's average temperatures for the Jordan Valley and eastern highlands (Ahmad 1989:8)

	Jordan Valley °C	Eastern highlands °C
January	14	4-8
February	14-16	4-8
March	16-20	8-10
April	20-24	12-14
May	26-28	14-20
June	28-32	18-22
July	30-32	20-24
August	30-32	20-24
September	28-30	24-28
October	26	16-20
November	20-22	12-14
December	14-16	6-10

Temperature ranges between the highlands and the valley floor can be extreme. This author has experienced snow fall in Amman with temperatures of -1°C (30°F) and after a drive of 40 minutes (35 kilometers/21 miles) to Deir 'Alla, enjoyed 30°C (86°F) weather. In his 1880 travels, Adam Smith on July 7 measured the temperature at Heshbon at 24°C (76°F) three hours later at Jericho he measured a temperature of 39°C (103°F) (Smith 1974:66-67). Similar differences between the temperatures of the valley and eastern highlands exist in the north. On the same journey during the period June 24-27, 1880, Smith measured temperatures at Um Queis (Gadara) of 28°C-32°C (82°F-90°F). In the valley below at Pella, temperatures ranged from 37°C-38°C (98°F-101°F). After ascending the wadi Yabis and arriving in the area around Ajlun, the temperature was 21°C (69°F) (Smith 1974:66-67).

The disparity in temperatures between the eastern highlands and the Jordan Valley has encouraged the pastoralists of Transjordan to travel between the two regions throughout history. Pastoralist and urban residents alike have descended into the valley from the cold winter weather of the highlands to the warmer environment where water spilling out of the various wadis is at its maximum from the higher winter rains throughout modern history. This pattern was probably in action during the Middle and Late Bronze Age period as well (Prag 1992:155-159).

Table 2.4: Comparing the average precipitation and temperatures to the regions of the valley

	Northern Jordan Valley	Central Jordan Valley	Southern Jordan Valley	Eastern Highlands	Western Highlands
Average precipitation	400 mm	300 mm	100 mm	400-600 mm	600 mm
Average days of rain >1 mm	50	40	30	50	No data
Average Temperatures	Summer 29°C/84°F (35°C/95°F can be reached in August) Winter 14°C/57°F	unavailable	Summer 35°C/95°F (40-43°C/109°F can be reached in August) Winter 17°C/63°F	Summer 32°C/90°F Winter 12°C/54°F	Summer 30°C/86°F Winter 13°C/55°F

2.2.2.5.2 Disease

The climate in the Jordan Valley is conducive to malaria. The disease was endemic with periods of increased outbreaks every five years, dependent on the rains, the length of the winter and how long seasonal people of the highlands stayed in the valley (Lumsden & Yofe 1950:65; Van der Steen 2004:21). Many of the early 19th century travel writers refer to the Arab population of the Jordan Valley, especially around Beth-shan as 'sickly': 'Malarious fever is prevalent, and the resident natives seem feeble and sickly' (Albright 1926:67; cf. Smith 1974:310-311; Van der Steen 2004:26).¹⁷

2.2.2.6 Hydrology of the Jordan Valley

The precipitation of the Jordan Valley was covered in section 2.2.2.5 on the general climate of the Jordan Valley. The critical level for 'dry' or 'arid' farming (agriculture based on precipitation only) for basic crops is around 230 mm or 9 inches a year.¹⁸ Therefore, the rain allows agriculture in the north, but makes it risky in the 'waist' and almost impossible in the southern parts of the valley. From the central 'waist' of the valley south, the Jordan River is too deep in the Zor to provide irrigation water for farming beyond its flood plain without mechanical irrigation. The side rivers and wadis are therefore critical for human settlement and production throughout the valley.

Underground water levels in the Jordan Valley vary greatly depending on the geology. There are a number of springs along cracks in the escarpment limestone but, in general, wells close to the escarpment must go down 100 meters (328 feet) before reaching water. Closer to the Zor, water can be found at 5 meters (16 feet). Ground water of the Southern Jordan Valley within 30 kilometers (18.6 miles) of the Dead Sea is very saline (Van der Steen 2004:21; cf. Kaptijn 2009:16-17).

¹⁷ Malaria in the Jordan Valley has been practically eradicated with only three cases being reported in the 1990s (World Health Organization country profile).

¹⁸ http://en.wikipedia.org/wiki/Dryland_farming Accessed on August 25, 2011.

Assuming the climate (with its precipitation) has not changed much between the Late Bronze Age and today or even if it was a bit drier, the precipitation levels in the valley would not be much different to those today due to the rain shadow effect. However, the water levels have changed dramatically especially in the past 50 years due to the water management policies of the surrounding nations damming and siphoning off the majority of water before it enters the valley. Jordan and the Syrian Plateau have also experienced major population growths resulting in huge water demands. The first recorded dam in the Jordan Valley was in 1932 at Deganya situated on the exit of the Jordan River from the Sea of Galilee in order to regulate the outflow from the Sea of Galilee and a small hydro-electric plant at the junction of the Yarmuk and Jordan Rivers. Both were abandoned and disassembled in 1938. In the years before the dam (1921-1932), the Jordan River exiting the Sea of Galilee measured 60 cubic meters/second in March and 4 cubic meters/second in October. From 1932-1939, the dam regulated the flow from the Sea of Galilee to 18 cubic meters/second in March and 8 cubic meters/second in October (Schattner 1962:29).

From the 1950s to today, a number of major dams and canal projects in Syria, Israel and Jordan have further reduced ground water from entering its natural drainage in the valley. The most notable being the Syrian dams along the Yarmuk River, Jordan's East Ghor canal (now known as the King Abdullah Canal) and the King Talal Dam on the Zarqa/Jabbok River as well as smaller dams along the eastern wadis and Israel's 'All Israel Plan' of draining the Huleh Valley and diverting the water exiting the Sea of Galilee to the National Water Carrier as well as expanding the West Bank well system.¹⁹

In some cases, these water projects have greatly increased the productivity of the Jordan Valley. They have also greatly changed the flow of surface and subsurface water into and through the valley, warping the modern-day visitor's observation on what the Jordan and other rivers and wadis were like in ancient times and adding to

¹⁹ This well system accounts for 35% of Israel's total annual water consumption. [Israeli] Central Bureau of Statistics, Annual Statistical Survey of Israel, No. 42, at 389 (1991).

the value of older, if not as precise, records and descriptions of the water resources of the valley.

The total watershed/catchment area for the Jordan Valley is 14,987 square kilometers (9312 square miles). 2,735 square kilometers (1700 square miles) of these include the Sea of Galilee and the headwaters of the Jordan River north of the Sea of Galilee. The remaining 83% of the watershed/catchment area flows directly into the Jordan Valley. The drainage basin for the Jordan Valley is asymmetrical and very lopsided toward the eastern side. Due to the height and proximity of the western highlands, the western watershed for the Jordan Valley is only around 600 square kilometers (373 square miles) as opposed to 11,750 square kilometers (7301 square miles) on the eastern side (Schattner 1962:24-28). The Yarmuk Basin accounts for 7,584 of these square kilometers (4712 square miles) followed by the Zerqa/Jabbok River whose basin is roughly 2960 square kilometers (1839 square miles), almost six times that of the total western watershed alone (Burdon 1954a:343-355). The asymmetry of the watershed and its contribution is magnified even further as the western catchment border runs an average of only 25 kilometers (15.5 miles) in a parallel line with the Jordan River. The vast majority of this area is arid to near-arid as it lies in the rain-shadow of the western highlands that receive between 200 and 400 mm of rain annually. The catchment basin on the eastern side is much wider and irregular due to deep wadis penetrating into the eastern plateaus. Some of these areas receive between 400 and 600 mm of precipitation per year.

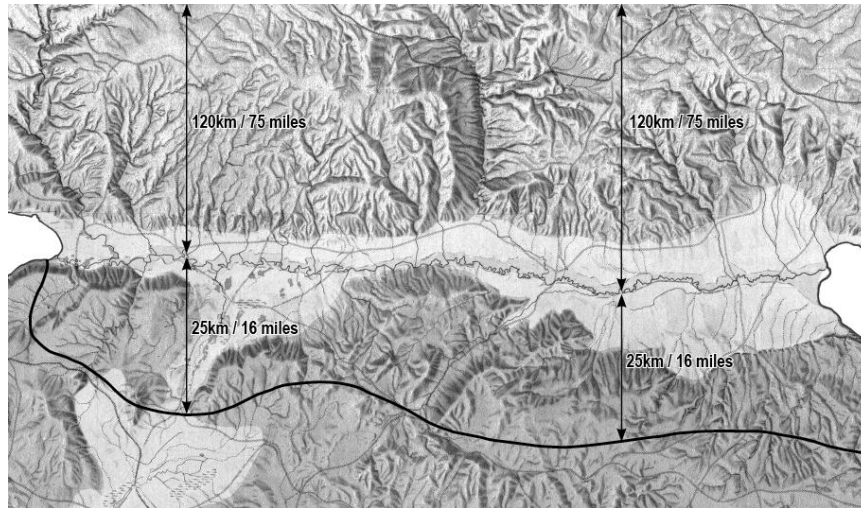


Figure 2.25: Watershed of the Jordan Valley

The eastern limits extend 120 kilometers into the eastern desert and northward through the Bashan and onto the Damascan Plateau to include the whole drainage basin of the Yarmuk (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

2.2.2.6.1 The major rivers

There are three major rivers in the Jordan Valley; the Jordan, Yarmuk and Zarqa/Jabbok. Of the three, the Yarmuk is the most influential with regards to both water and creating a north-south barrier to travel.

The Yarmuk River: Before modern water management of the 1950s, the Yarmuk River contributed almost as much water to the Jordan River as the Sea of Galilee. From 1926-1932, measurements at the Yarmuk-Jordan confluence averaged just under 100 million cubic meters less than those measurements made at Deganya (Schattner 1962:24-35; Table 2.6). However, the Jordan River exits the Sea of Galilee in predictable gradual seasonal changes (owing to the size of the Sea of Galilee acting as a balancing basin). The Yarmuk River had violent and unpredictable changes due to its large watershed across the eastern plateau. In the period of 1926-1932, discharge from the Yarmuk into the Jordan River increased by 20-30 times in just a few hours, easily surpassing the output of the Sea of Galilee by 50% or more. In February 1940, the Yarmuk's flow into the Jordan River increased from 50 cubic meters a second to 1700 cubic meters a second in just two hours. In a dry year (1946), the Yarmuk may only flow at 15.9 cubic meters a second. In a wet year (for instance, 1940) it flows at 660 cubic meters a second. Due to the meandering course of the Jordan River and the flood plains of the Zor, it took an average of 48 hours for

the Yarmuk's flood crest to be realized at the Allenby Bridge 85 kilometers to the south (Schattner 1962:30-33).

The unpredictability of the Yarmuk River, especially in the winter months when flooding is most likely to occur, would have made the river a most difficult and dangerous obstacle to ford, and must have created a barrier for north-south travel. The Jordan River between the Sea of Galilee and Beth-shan, has a wide flood plain with shallow banks that can absorb seasonal flooding and still be relatively easy to ford (as opposed to the 'waist' and the southern sections with their dense Zor and the deep marly walls of the Qattara) (Monson & Lancaster 2008:10-11). The fords across the Jordan River, north of the Yarmuk junction, must have been easier to cross for most of the year than those below the Yarmuk, funneling traffic to the Bashan and Damascus plains towards the northeastern routes up the escarpment.

The Yarmuk is the largest contributor to the northern section's rich soil. Its alluvial fan not only pushes the Jordan River towards the west side of the valley but keeps its river bed broad and shallow providing many opportunities for crossing. The ongoing deposits of alluvium have undoubtedly caused the Yarmuk to change its course from the canyon mouth to the Jordan River throughout the centuries (Schattner 1962:24-35).

The Jordan River today is but a mere trickle of years past. The most dramatic reductions being caused by modern water management policies of the surrounding nations (section 2.2.2.6).

The first published scientific study on the Jordan River was the Lynch expedition of 1848. The Lynch expedition spent eight days (10-18 April 1848) studying the Jordan River between the Sea of Galilee and the Dead Sea. The expedition divided into two parties, one party navigated the river in boats while a shore party paralleled the river on western Ghor except in the central 'waist' section where they crossed over to the eastern Ghor. A brief summary of Lynch's observations concluded that the Jordan River followed a 'tortuous course' of more than 200 miles (321 kilometers) within its sixty miles (97 kilometers) of latitude and four to five miles (6-8 kilometers) of

longitude. Within its 'sinuous turns were no less than twenty-seven sets of rapids robbing the river of any commercial value'. The Ghor held more commercial promise as he described 'an extensive plain, luxuriant in vegetation, and presenting a richness of alluvial soil, the produce of which, with proper agriculture, might nourish a vast population.' As he passed through the 'waist' of the valley, Lynch noted a 'most beautiful tract of alluvial entirely destitute of cultivation' (most likely the Zarqa/Jabbok River fan). Later, as Lynch entered the southern portion of the valley, the 'salt, blown up from the Dead Sea coated rocks and vegetation, extinguishing the life that was abundant in the northern Ghor' (Lynch 1849: 182,204,233,265).



Figure 2.26: The winding Jordan River

The Jordan River in the Zor flows a distance of 338 kilometers (210 miles) down the 105 kilometers (65 mile) length of the Jordan Valley (Photo: The American Colony and Eric Matson Collection 1932: 13637 www.lifeintheholyland.com).

The detailed maps of this expedition were used well into the 20th century and the measurements of the Dead Sea's depth, configuration and chemical composition are the standard comparisons for changes in the Dead Sea today. With the similarities of climate between the Late Bronze Age and today, modern water management of the past fifty years has probably changed the river more than natural and manmade activities of the previous three centuries combined. Those who have visited the Jordan River today or simply seen pictures of it are rarely impressed by its size or flow. To give an appreciation for this river and a small glimpse of its former glory, Lynch's journal explains the size and flow of the Jordan River:

April 10, 1848. At 3.45, we swept out of the lake; course, W. by N. The village of Semakh on a hill to the south, and Mount Hermon brought into view, bearing N. E. by N ... A number of wild ducks were upon the water, and birds were flitting about on shore. At 4.30, course W. S. W. abruptly round a ledge of small rocks; current, two knots. Our course varied with the frequent turns of the river, from N. W. by W. at 4.35, to S. at 4.38. The average breadth of the river, about seventy five feet; the banks rounded and about thirty feet high, luxuriantly clothed with grass and flowers. The scarlet anemone, the yellow marigold, and occasionally a water-lily ... close to the water's edge, but not a tree nor a shrub. At 4.43, we passed an inlet, or bay, wider than the river, called El Muh, which extended north a quarter of a mile. We lost sight of the lake in five minutes after leaving it. 4.46, passed a low island, ninety yards long, tufted with shrubbery; left bank abrupt, twenty-five feet high; a low, marshy island, off a point on the right, which runs out from the plain at the foot of the mountains. Water clear and ten feet deep...When the current was strong, we only used the oars to keep in the channel, and floated gently down the stream, frightening, in our descent, a number of wild fowl feeding in the marsh grass and on the reedy islands. At 4.56, current increasing, swept round a bend of the shore, and heard the hoarse sound of a rapid ... 5.05, we shot down the sluice ... Our course, since leaving the lake, has varied from south to N. W. by N., -the general inclination has been west; river, twenty-five to thirty yards wide; current, two and a half knots; water clear and sweet. We passed two islands, one of them very small (Lynch 1849:173-177).

Tuesday, April 11, 1848. 8.10 A. M., started, the boats down the river, the caravan by land. The current at first about 2 ½ knots, but increasing as we descended, until at 8.20 we came to where the river, for more than three hundred yards, was one foaming rapid ... there were cultivated fields on both sides ... and shot them successively down the first rapid. The water was fortunately very deep to the first fall, where it precipitated itself over a ledge of rocks. We pulled well out into the stream, bows up ... below us were yet five successive falls, about eighteen feet in all, with rapids between, - a perfect breakdown in the bed of the river ... 1.46, descended a cascade at an angle of 30½, at the rate of twelve knots, passing, immediately after, down a shoal rapid ... The course of the river had been very circuitous ... 2.40, The surface of the plain is about fifteen feet above the river ... At 4.45, stopped to rest, after descending the eleventh rapid we had encountered. The velocity of the current was so great that one of the seamen, who lost his hold (being obliged to cling on outside), was nearly swept over the fall, and, with very great difficulty, gained the shore ... 5 P.M., Half a mile below 'Abeidiyeh the river became deeper, with a gentle descent. The river fifty-five yards wide and two and a half feet deep. Current, four knots; the water becoming muddy. We saw a partridge, an owl, a large hawk, some herons (hedda), and many storks, and caught a trout (Lynch 1849:177-180).

Wednesday April 12, 1848. 10.15 A. M., Cast off and shot down the first rapid, and stopped to examine more closely a desperate-looking cascade of eleven feet. In the middle of the channel was a shoot at an angle of about sixty degrees, with a bold, bluff, threatening rock at its foot, exactly in the passage. It would therefore be necessary to turn almost at a sharp angle in

descending, to avoid being dashed to pieces. This rock was on the outer edge of the whirlpool, which, a cauldron of foam, swept round and round in circling eddies. Yet below were two fierce rapids, each about 150 yards in length, with the points of black rocks peering above the white and agitated surface. Below them again, within a mile, were two other rapids - longer, but more shelving and less difficult ... At 1.45, passed down the fourth fall and a shelving rapid of one third of a mile. Hauled over to the right bank, just above a shelving rapid, with a yet more ugly sheer at an abrupt angle ... At 4.20, passed the mouth of the Yermak (Hieromax), forty yards wide, with moderate current ... 4.48 passed an island twelve feet high, covered with grass and weeds ... was the most perilous part of our passage, owing to great velocity of current, about twelve miles an hour (Lynch 1849:189-192).

Thursday April 13, 1848. The river thirty-five yards wide, six feet deep, gravelly bottom; current, five knots ... 2:39, remarkably smooth but rapid descent. 2:41, river very serpentine, five feet deep; a beautiful strip of variegated sands and marls; passed a wady, or dry ravine, on the right. 2:46, course S.W. to W. by N., thick canes and thistles; ... The river averaged forty-five yards width, four feet deep, and five knots current (Lynch 1849:202-203).

Friday April 14, 1848 (as they passed the Wadi Yabis). The River narrowed from seventy yards with a depth of two feet and a current of two knots to thirty yards with a depth of ten feet and a current of six knots. The boats had little need of the oars to propel them, for the current carried us along at the rate of four to six knots an hour, the river, from its eccentric course ... curved and twisted north, south, east, and west, turning, in the short space of half an hour, to every quarter of the compass (Lynch 1849:211).

Saturday April 15, 1848 (as they passed through the 'waist'). We have, today, descended ten moderate and six ugly rapids ... The course of the river, today, has varied from northwest to south, and from thence to east; but the prevailing direction has been to the southward and westward. The velocity of the current has ranged from two to eight knots per hour; the average about three and a half knots. The depth has been in proportion to the width and velocity of the stream. At one place the river was eighty yards wide and only two feet deep. The average width has been fifty-six yards, and the average depth a little more than four feet (Lynch: 1849:238).

Monday April 17, 1848 (In the southern section across from Jericho). The river, forty yards wide and seven feet deep, was flowing at the rate of six knots down a rapid descent, with much drift-wood in the stream ... At 1.20, came to the River Jabok (Zerka), flowing in from E. N. E., a small stream trickling down a deep and wide torrent bed ... At 4.32, passed a dry torrent-bed on the right, probably the Wady el Hammam ... 4.52, we passed down wild and dangerous rapids, sweeping along the base of a lofty, perpendicular hill. At 5.14, a small stream on the left: stopped to examine it; found the water clear and sweet...The Jordan was forty yards wide, twelve feet deep with a bottom of blue mud (Lynch 1849:252-254).

April 18, 1848. At 3.25, passed by the extreme western point, where the river is 180 yards wide and three feet deep, and entered upon the Dead Sea (Lynch: 1849:268).

The picture Lynch records is of the Zor as a twisting turning river that 'in a space of sixty miles of latitude, and four or five of longitude, traverses at least 321 kilometers. Some of these turns form slow moving eddies punctuated between twenty-seven threatening rapids, besides a great many of lesser magnitude' (Lynch 1849:265).

This picture is vastly different from the Jordan River today. One would expect the natural process of erosion and sediment that creates such a 'meandering' river has been in process through the centuries. The twists and turns that continue to grow or be cut off and bypassed can be seen in aerial photographs from the past century. Therefore, it is impossible to chart the river course of the Late Bronze Age. One can simply assume that the general pressure of large alluvial wash of the Yarmuk pushed the river to the west side of the valley in the north and in the central and southern regions stayed within the high cliffs of the Qattar (Lynch's 'secondary banks').

i. 20th century flow records

It is difficult to know if 1848 (the year of Lynch's expedition) was a wet or dry year or if his description of Jordan River represents a norm or not. Between 1932 and 43, the summer averaged 80 million cubic meters a month and the winter averaged 120 million cubic meters a month. February (the usual time for flooding) averaged 170 million cubic meters a month. Within this eleven year period of monitoring, there were three massive floods; the 1933 February reading was 379 million cubic meters, over three times the average. February 1935 and 1941 saw floods averaging 280 million cubic meters. The range of low-high river flows is most evident in comparing the absolute minimum measurement of April 22, 1946 (1,380,000 cubic meters/15.9 cubic meters a second to the absolute maximum of 31 January 1940 (28,333,800 cubic meters/660 cubic meters a second) (Schattner 1962:33). It was already mentioned in discussion on the Yarmuk River that in February 1940, the Yarmuk's flow into the Jordan River increased from 50 cubic meters a second to 1700 cubic meters a second in just two hours (Schattner 1962:33). On April 13, 1848, one day

past the Yarmuk confluence, Lynch noted, 'the river had fallen by two feet in two days' (Lynch 1849:173).

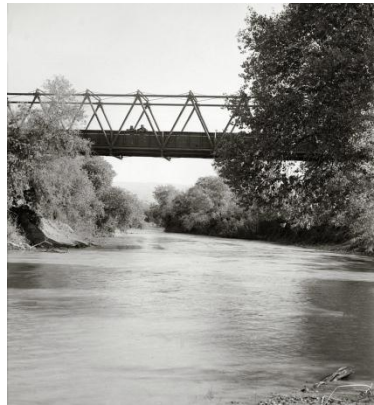


Figure 2.27: The Jordan River and Allenby Bridge between 1918 and 1946
(Photo: The American Colony and Eric Matson Collection 1932: 09045 www.lifeintheholylnd.com).

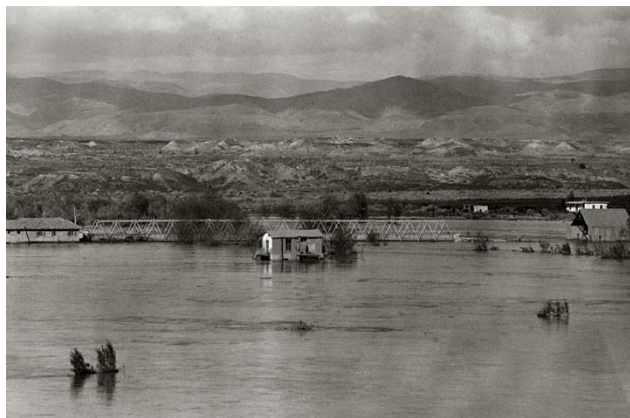
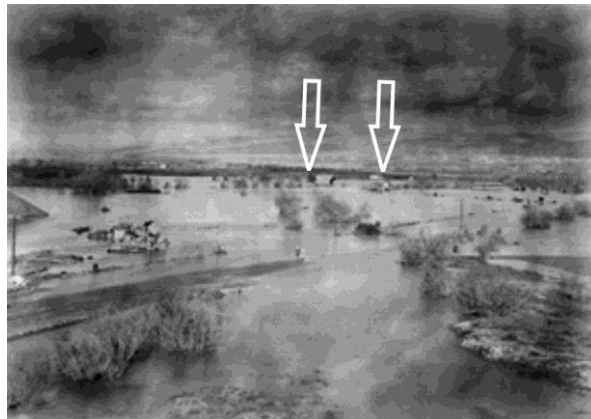


Figure 2.28: The February 1935 flood of the Jordan River

In the left hand picture the Allenby Bridge is on the right third of the photograph between the long gate house on the west bank (right side) and small white gate house on the east bank. The right side photograph is a close up of the Allenby Bridge from the left side photography (negative reversed). The entire bridge is cut off by several hundred meters of water on the east bank. The 1933 flood measured 30% greater in volume in this 1935 flood (Photo: The American Colony and Eric Matson Collection 1932: 04341, 00450 www.lifeintheholylnd.com). The width, depth and speed of the current compared with Figure 27 above would certainly have made it impassable on foot or ferry.



Figure 2.29: A ford across the Jordan near Jericho

(left) West Bank looking to the East Bank, photograph taken between 1898 and 1946.

Figure 2.30: On the West Bank near Jericho during the 1935 flood

(right) The East bank can be seen in the distance between the break in the tree line in the foreground. The current along the bank appears to be flowing strongly making the fords impassable as compared to the scene on the left (Photo: The American Colony and Eric Matson Collection 1932: 11714, 04343 www.lifeintheholyland.com).

Lynch also made notes of recent floods (which probably occurred in February). In describing the trees along the banks of the Jordan, 'a bush fifteen feet up in its branches, lodged there by a recent freshet; for it was deciduous, and the green leaves of the early season were upon it. The river must this year have overflowed to the foundations of the second terrace' (Lynch 1849:248). This observation was made less than an hour before the expedition reached the ford where the road between Nablus and Salt crossed the river and where the Zor is several hundred meters (yards) across. This ford must certainly have been impassable during that recent flood.

The rapids and water falls recorded by Lynch are due to the river's drop of elevation. In the 105 kilometers (60 miles) between the Sea of Galilee and the Dead Sea, the river drops 186 meters (610 feet), an average of .6 meter/1 kilometer (9 feet/1 mile). The drop is not a steady fall but there are areas of fast current and rapids. Near the Sea of Galilee, the river falls 12 meters/1.6 kilometers (40 feet/1 mile). But if you account for the zigzagging of the river, the river's true length is a little over 321 kilometers (200 miles) over the 104 kilometers (65 miles) southern movement, making the actual descent of the river a much smaller average per mile.

ii. Fords and Bridges

If the water fluctuations of the early 20th century were similar in the Late Bronze Age, it must have played havoc with local and international travel across the Jordan Valley. The Egyptian and Biblical records only mention fords across the river. The 6th century Madaba map only shows the southern section of the Jordan River and a picture of a ferry that crosses the river. Although the Egyptians were a seafaring people and would certainly have ferry boat technology, the record is silent on any technology used for crossing the river. In the 13th century BC (see 3.2.2.4), the satirical Egyptian scribe teases a younger scribe on the difficulties of crossing the Jordan, 'Pray, teach me about the appearance of Qiyen, let me know Rehob, explain Beth-Shean and Tirqa-El. The stream of Jordan, how is it crossed?' (Papyrus Anastasi I:22:8 translated by Rainey [Rainey & Notley 2006:102]).



Figure 2.31: A ferry across the Jordan River at one of the southern fords across from Jericho (circa 1910-1920)
 The sterile marl cliffs rising out of the Zor to form the Qattara are clearly visible
 (Photo: The American Colony and Eric Matson Collection 1932: 05126, 04186 www.lifeintheholylan.com).

All the Biblical references to crossing the Jordan are at fords, except the crossing of Joshua when the waters were stopped (Joshua 3:13-17). Other historical records of the Jordan being stopped due to earthquakes and slides of the Qattara cliffs into the Zor occurred in 1160, 1267, 1534, 1546 (for two days), 1834, 1906 (10 hours) and 1927 (20 hours) (Sivertsen 2009:99; Humphreys 2004:21).²⁰

²⁰ Earthquakes in the valley: Geological movements have played a great part in the development of the Jordan Valley. Most folding and buckling of stone occurred in earlier geological period. However, the Jordan Rift Valley is one of the most pronounced seismic areas of the Levant. Historical records of ancient earthquakes are incomplete. Jericho is among the most frequently and devastatingly recorded areas affected by earthquakes. The poor consolidation of the rock material of the Jordan Valley magnifies the probability of changes in structure of the landforms and human structures. For records of earthquakes in the Levant between 1606 BC and AD 1927, see Willis (1928) (some of his dates from As-Soyuti are off by 600 years as he transcribed the Islamic Anno Hejira dates directly into Anno Domini dates).



Figure 2.32: The July 1927 earthquake

The earthquake destroyed St. John's Convent on the Jordan River (upper left moving clockwise), collapsed the banks of the Jordan, separated parts of the river banks with large fissures, and blocked the river with landslides (Photo: The American Colony and Eric Matson Collection 1932: 10446, 03036-38 www.lifeintheholyland.com).

Fords are commonly found immediately downstream of major tributaries as the heavier concentration of eroded material carried by the water is deposited, making the river shallower and wider. Historically, there appears to be four groupings of fords along the Jordan River: two in the north, on the flat plain where the Jordan exits the Galilee and at the width of the Beth-shan valley between Beth-shan/Rehob and Pella (Papyrus Anastasi I; Judges 6:3; 7:1 and 22). The third group was in the central 'waist', near Adam across from the Wadi Farah and where the Zerqa River

enters the Jordan. The fourth grouping is in the south across from Jericho (Judges 7:24; 12:5-6) and south towards the Dead Sea (Joshua 2; 3; Judges 3:28; Ruth).



Figure 2.33: Fording the Jordan in the central 'waist' (circa 1932-1946)
(Photo: The American Colony and Eric Matson Collection 1932: 10420 www.lifeintheholylnd.com).

Archaeologically there are at least three Roman to Mamluk bridges across the Jordan and one across the Yarmuk; Jisr Um el-Kanajir, 1.6 kilometers (1 mile) south of the Sea of Galilee, Jisr Mejami'a, 2.4 kilometers (1.5 miles) south of the Yarmuk junction and the Damiyeh Bridge across from Wadi Far'ia and Zerqa River (cf. Avi-Yonah 1957). The Damiyeh bridge was the longest bridge in the Jordan Valley being constructed in 1266 by the Mamluk ruler, Baybars, and was 400 meters (1,312 feet) long. It was in use until the Ottoman period, and was blown up in 1946. The British constructed a new bridge in 1947, and the Jordanians added another one in the 1950s. The two bridges were destroyed by the Israeli Defense Force during the Six Day war (1967). Later that year, Jordan constructed a pre-fabricated 'Bailey' bridge on the south side (<http://www.biblewalks.com/sites/AdamBridge.html> Accessed 25 August 2011).

The bridge is no longer operational with all traffic being routed to the Allenby/King Hussein Bridge. Although outside the period of our study, it is worth noting that the location of these bridges corresponds closely to the Late Bronze Age/Iron Age transportation routes and river fords (2.3.2). That the Mamluke ruler built the Damiyeh Bridge 400 meters (1,312 feet) long also hints to a time when the Jordan River regularly swelled to near this width in order to make such a bridge necessary (Figure 2.28).



Figure 2.34: The Zor in the area of the 'Fords of Adam' looking east from the edge of the western Qattara. The Jordan River is not visible due to its size and thick brush along the banks. The ruins of the Damiyeh bridge are in the center foreground slightly to the right. The reddish brown tell of Damiyeh (Tell Adam) can be seen against the green of the Zor slight to the right and above the plastic greenhouses beyond the ruins of the bridge. The bare marl cliffs of the Qattara rise above the Zor. The flat Ghor and the rising hills of Gilead are visible in the background. The break between the hills of Upper Gilead in front and Lower Gilead in the left background is the Wadi Zerqa (Photo: <http://www.biblewalks.com/sites/AdamBridge.html> accessed on 14 November 2011).

19th century descriptions of fording show that the Jordan River can be dangerous. Lynch describes the ford crossing near the Damiyeh Bridge remains (in the area of the Biblical central fords around Adam and Succoth Joshua 2:7; Judges 3:28; 12:5) as,

Crossing ford near Succoth/Adam. A little barren island divided the stream at the ford, and the current swept by with such rapidity as to render it doubtful whether the passage could be effected. Mr Bedlow, however, made the attempt, and succeeded in reaching the island with no greater inconvenience than dripping extremities and a moist saddle. The rest were soon in the stream, clumsy camels and all, breasting and struggling, with various success, against the foaming current. There was a singular mixture of the serious and the grotesque in this scene, and the sounds that triumphed above the boisterous ford, were the yells of the camel-drivers and the cries of the Arabs, mingled with shouts of unrestrained laughter as some impatient horse reeled and plunged with his rider in the stream, and the water was scattered about in froth and spray like a geyser.

The depth and impetuosity of the river caused us some apprehensions for the safety of our cook, Mustafa, who, being mounted on an ill-favoured, scrubby little beast, already laden to the ears with the implements and raw materials of his art, was in danger, donkey and all, of being snatched from us, like another Ganymede, by the Epicurean river-gods, or borne away by some deified Apicius, disguised as a donkey, for the little brute looked at times as if he were swimming away, not fording the stream. The tiny animal, as soon as it had achieved the passage, clambered, dripping, up the sloping bank, and convulsively shaking his eminently miscalculated ears, signaled his triumphant exploit by one prolonged, hysterical bray, which startled the wilderness, and seemed to be a happy imitation of a locomotive whistle, and the sound of sawing boards, declining gradually to a sob (Lynch 1849:224-225).

Thomson describes a ford in front of his 1890 camp in the Southern Jordan Valley:

Just there, it is broad and not more than four feet deep, so that the villagers were continually fording it; men, women, children, returning home from

their fields to the east of the Jordan; a rural scene curious as rare. Sheep, goats and even donkeys had to swim, and it required the constant care of the shepherds to prevent their being carried down the stream together. Cattle and horses came boldly across and so did the men, but the women and children needed the help of the men, who brought them safe to shore (Vincent, Lee & Bain 1894:221).

At other times individuals and horses simply walked across. The fords of the north simply require a shallow crossing due to the broad alluvial pan. In the central and southern sections, a ford requires both a shallow crossing point and access through the steep slippery marl banks of the Qattara as well as passage through the thick underbrush of the Zor.

In regular or dry months, there were clear shallows with slow moving currents that allowed for easy crossing of the Jordan River. But during times of high water flow, the Jordan River must have created a formidable barrier to cross.

iii. Jordan River: Border or Barrier

Although the Jordan River and the Zor are major geographical features of the Jordan Valley, twisting a deeper, narrower valley (river bed) within the valley, some places 150 feet deeper than the Ghor and from 200 yards to a mile broad (Smith 1974:321). The Zor with its banks of white marl with dense growth of tamarisks and tangled bush is often a symbol of danger or trouble in the centuries immediately after the Late Bronze Age (Jeremiah 12:5; 49:19; 50:44; Zechariah 11:3). The Jordan River and the Zor Rivers appear to be more of a boundary line than a major physical barrier. The exception is in the month of February (and most likely January and March as well) when regular flood waters would make the fords extremely dangerous, if not totally impassable.

In Papyrus Anastasi I:22:8, the Egyptian scribe describes the location of crossing near Beth-shan and Rehob (see 3.2.2.4). The context of the letter hints that the crossing is difficult but possible for those with the proper knowledge and training. Amarna letters 255 and 285 hint of an alliance between Gezer, Jerusalem and possibly a son of Lab'ayu at Pella (3.2.1.9; Figure 3.8). The group of Amarna letters originating from both sides of the Jordan River in the north and central parts of the Jordan Valley (EA

224, 232, 234, 235, 249, 250, 255, 256, 285) demonstrate individual political identities but clear interaction and exchanges across the river (see 3.2.1.9).

In the Biblical text, the Jordan River is a clear boundary line between the tribes of the east (Gad and Reuben: Joshua 13:23, 27) and west (Judah, Ephraim, Benjamin, Issachar and Naphtali: Joshua 15:2, 5; 16:7; 18:12,20; 19:20,33). The tribe of Manasseh, was on both sides of the river but the eastern and western allotments were given as two distinct allotments (eastern half: Joshua 13:29; western half: Joshua 17) (see 3.3.4.1.3; Figure 3.25). However, most references to the Jordan River are preceded by the prepositions 'unto', 'over' or 'across' (Genesis 33:10; Numbers 34:10-12; Deuteronomy 3:20; Joshua 1:2) which indicates a clear and expected pathway across the Jordan versus a barrier.

The allotment of the Levitical cities and Cities of Refuge appears to be strategically divided on both sides of the river, in part to keep political unity (Joshua 20-21) (Figure 3.22). In Numbers 32, Moses appears to take pre-emptive action against the Jordan River becoming a political/cultural barrier and not just a boundary that could divide Gad and Reuben from the tribes crossing the river. However, a political/cultural barrier did develop across the Jordan and the clearest example is the conflict between Jephthah and the Gileadites against Ephraim. The Ephraimite's distinct accent made it easy for the two parties to distinguish between themselves (Judges 12:1-7). Although the Israelite tribe fought amongst themselves regardless of which side of the river they were on, the river boundary did seem to exasperate or magnify the conflicts when they occurred (Gideon against the men of Succoth and Peniel: Judges 8; the western confederation against Jabesh-Gilead: Judges 21). The Moabite king, Eglon, also established a political center across the Jordan in Jericho to extend his control over the Israelites (Judges 3:12-30).

It is difficult to quantify the Jordan River as a strategic military obstacle. Throughout its history, the river has been crossed by military forces. Until World War I, no major battle had been recorded over its banks. The fords are obvious strategic and tactical points of control. The book of Judges records three episodes where the fords were controlled for military purposes, Ehud, Gideon/Ephraim and Gileadites cutting off

the retreats of the Moabites, Midianites and Ephraimites (Judges 3:38; 7:25; 12:1-7). In these accounts, the fords of the river are shut down in order to capture routed and fleeing soldiers. No records are known of the fords being guarded as a border defense.

Political opponents during Israel's United Kingdom crossed over the Jordan to hide or rally support. But during the great invasions of Egypt, Assyria, Babylon, Rome or the Crusaders, no attempt to mount a defense along the river is recorded. The Byzantine and Arab forces chose to make their stands in the passes of the eastern or western highlands (Yarmuk and Hittin), rather than in the valley. During the Maccabees, the Jewish troops fought on the bank of the Jordan but the only use of the river was to swim across it in flight without the Syrian forces pursuing (1 Maccabees 9:32-29). The only recorded attempt to use the Jordan River as a defensive position was in 1918 when Turkish forces held back the British for two months at the Damiyeh Bridge and southern fords. The river was at flood stage and too swift for swimmers and boats.

In summary, the eastern or western highlands have never used the Jordan River or Valley as a defensive line. The Jordan River was not a military obstacle in the Late Bronze Age. It was a convenient border marker and provided a social division between the east and west. Moses feared that the Jordan would separate the tribes (Numbers 32) and this did happen to some degree (Gideon/Succoth, Jephthah/Ephraim and Jabesh-Gilead). But the separation was superficial and more political as not only Israelites but the Moabites continued to intermingle across the river (Ruth).

The seasonal and annual change of the river flow coupled with the need to cross the river both unified and separated the three sections of the Jordan Valley. Local knowledge of the changing positions and conditions of each section's fords would be necessary to the regional and international traveler. Although established pathways would clearly lead to general points of the ford, local current knowledge would greatly aid the traveler. Nineteenth century travelers found themselves dependent on locals from each section of the valley to safely navigate the Jordan. There was

apparently no total valley 'expert' on all the fords. Their guides' role was also complicated by the local political divisions of the valley by the various tribes despite the overall government of the Ottoman authority. A situation perhaps not too different from the Late Bronze Age period when Egyptian imperial power dominated the valley but individual cities held immediate control over their fields. Lynch describes his need for local guides in April, 1849, 'The friendly Arab, although he knew the fords and best camping-places on the river, in his own district, was, like all the rest we had met, wholly unacquainted with the stream at all other points' (Lynch 1849:228,255).

The Zerqa (Jabbok) River's watershed is the third largest watershed and the river's size is reflected in this compared to the Yarmuk and Jordan Rivers. The Zerqa River begins in the springs of modern downtown Amman (Biblical Rabbah), and then flows northeast to modern Zerqa before turning west and dropping from 822 meters (2700 feet) above sea level to 304 meters (1000 feet) below sea level in a progressively deeper and sharper gorge. As it exits the mouth of the wadi, the river has created a wide fertile alluvial pan. The Bible calls this pan, 'The Plain of Jordan: 'In the plain of the Jordan the king cast them, in the clay ground between Succoth and Zarethan' (1 Kings 7:46). Today, the Zerqa River enters the Jordan River just north of Tell ed-Damiyeh and the fords of Adam/Damiyeh Bridge. Its alluvial output helps create the fords of the central Jordan Valley.

The river's length is over 96 kilometers (60 miles) long. The drainage basin for the Zerqa/Jabbok is roughly 2960 square kilometers (1,840 square miles) and its pre-1940 discharge into the Jordan Valley was 60 million cubic meters a year. In the dry months, its flow averaged 2.5 million cubic meters and 5 to 8 million cubic meters in the winter (Schattner 1962:26). The stream is shallow and fordable in most areas, except where it occasionally flows through narrow channels.

In 1977, the King Talal dam was built across the Zerqa 14.5 kilometers (9 miles) from the mouth of the Wadi Zerqa with a storage capacity of 86 million cubic meters. The maximum flood flow recorded into the King Talal dam between 1977 and 1997 was 2.5 million cubic meters on a single day, November 29 1979 (USGS 2007:35). One can

only guess what the discharge into the Jordan Valley would have been if this total would have been added to the drainage basin of the lower 14.5 kilometers (9 miles) of the river. Since 1980, there have been six years of water flow into the King Talal dam ranging between 120 and 190 million cubic meters (USGS 2007:35). Assuming climatic patterns have not changed significantly, the Zerqa/Jabbok River was a significant contributor to both the water level and alluvial material into the Jordan Valley in the Late Bronze Age and capable of extreme flooding.

In the Biblical times, the Zerqa was known as the Jabbok. The Jabbok River marked the northern border of the kingdom of Sihon, king of the Amorites (Numbers 21:23-24; Deuteronomy 2:37; Joshua 12:2) and the boundary between the Transjordanian tribes of Israel and the Ammonites (Deuteronomy 3:16; Joshua 12:2; Judges 11:13, 22). Throughout antiquity, the Jabbok has been a natural boundary as well as a passageway between the Jordan Valley and the eastern highlands, marking the border between Ammon and the tribes of Reuben and Gad (Deuteronomy 3:16).

The course of the Jordan today is similar to that recorded by Lynch back in 1848,

Came to the River Jabok (Zerka), flowing in from E. N. E., a small stream trickling down a deep and wide torrent bed ... The water was sweet, but the stones upon the bare exposed bank were coated with salt. There was another bed, then dry, showing that in times of freshet there were two outlets to this tributary, which is incorrectly placed upon the maps (Lynch 1849:253).

The Zerqa/Jabbok enters the Jordan a little over 11.8 kilometers (7.3 miles) south of the western line of the Wadi Zerqa. However, with any river that carries quantities of alluvium and deposits them along its path, it is expected that the river will change its course as alluvial deposits continuously reshape the river bed.

Similar to the meandering and changing course of the Jordan River, it is expected that the course of each tributary (more so of those with a large alluvial pan) has changed considerably over the centuries as the waters deposit alluvium along its course. Franken's excavations at Tell Deir 'Alla uncovered a branch of the Zerqa River bed running along the north side of the tell. The river bed was 2.36 meters below the 1960 valley floor cutting into the Late Bronze and Iron Age levels. In the early 1960's

before modern agriculture practices began large scale plowing, Franken reported that he could still make out the slight depression of this branch of the Zerqa. Franken abandoned the search for the Late Bronze Age cemetery of Tell Deir 'Allah when he measured that flood deposits on the north and east side of the tell was on average over two meters thick over the Iron Age levels²¹ (cf. Steiner and Van der Steen 2008:29). There is a slight possibility that this northern river 'branch' could have been an irrigation canal. Kaptijn argues that irrigation trenches were used in the Late Bronze – Iron Age (see 2.3.3.2). The number of Late Bronze Age tells along the Zerqa River's current course suggest that this branch of the river has maintained its course. Modern examples of the shifting course of the Jordan's tributaries are

- the Nahal Bezeq (Wadi Shubash) which, during the floods of 1955, overflowed its banks and carved out a new course which now enters the Jordan 1.5 kilometers (1 mile) south of its previous junction; and
- the Nahal Avuqa (Wadi Jizl) which flows from the Beth-shan Valley and formally entered the Jordan River north of Kefar Ruppin but now flows 4 kilometers (2.5 miles) to the south (Schattner 1962:97).

This ongoing process of erosion and silting accounts for the changes from Lynch's, The Palestinian Exploration Fund's and many other late eighteenth and early 19th century maps to today's maps. Certainly, much more dramatic changes would have occurred since the Late Bronze Age.

Secondary rivers and wadis: Far smaller in scale than the Yarmuk and Zerqa/Jabbok, there are a number of other perennial and seasonal rivers that flow into the Jordan. Today, most of these are dammed or the water is siphoned off for human and agricultural use long before reaching the Zor. Only the dry wadi depressions or the

²¹ Excavations at Tell Rehov Stratum D-11 dated to the end of the Middle Bronze Age II or the beginning of the Late Bronze Age rests on travertine bedrock 1.2 meters below the presentday alluvial level on the west side of the mound (<http://rehov.org/Rehov/Results.htm#Late%20Bronze> accessed 26 December 2011). The Deir 'Alla identification of Late Bronze/Iron Age ground level being 2.3 meters below the current level and the Tell Rehov observation shows that alluvial deposits since the Late Bronze Age has significantly raised the valley floor.

occasional flash flood after an exceptional winter rain hints at the probably capacity of these wadis before modern water management. The journals of 19th century explorers, such as Porter (1889:193) mention the fording (with little difficulty), the numerous small rivers flowing thru the Ghor and the swampy nature of the Harod Valley and the Wadi el-Mallaha. Other rivers and wadis that are more seasonal today but probably flowed more consistently and heavier in the past are:

Table 2.5: Rivers and wadis that flowed more consistently and heavier in the past

Northern Section	East side	West side
	Wadi 'Arab – was dammed in 1986 with a storage capacity of 16.8 million m ³	Nahal Yavne'el – fed by no less than 20 Springs from the plateau above ²²
	Wadi Taiyiba	Nahal Tabor/Wadi Bira
	Wadi Ziqlab – was dammed in 1967 with a storage capacity of 3.9 million m ³	Nahal Harod – spring fed from Harod Spring at the northwest base of the Gilbo'a Mountains
	Wadi Yabis (possibly the Brook Cherith of I Kings 17:3 where Elijah was nourished during a time of regional drought) (cf. Baly 1957:198)	Nahal Avuqa (Wadi Shubash) – spring fed
		Wadi El Malih – spring fed
Central Section 'the Waist'	Wadi Kufrinja	Wadi Farah
	Wadi Rajib	
Southern Section		
	Wadi Malaha (Wadi Malaha runs parallel to the Jordan River and has three east-west wadis feeding into it, W. Basset el-Ahmar, W. Basset El Faras and W. Abyyad. The	Wadi Mallaha (Wadi Malaha runs parallel to the Jordan opposite of Wadi Malah on the eastern side. This wadi collects water from the wadis Akhmar, Petsael, Zananir and Reshrash and their many springs in the escarpment)

²²http://travelingluck.com/Asia/Israel/Ha%E1%BA%94afon/_293219_%60En+Yavne%27el.html#local_map Accessed 3 September 2011.

	Karameh dam was completed in 1997 with a storage capacity of 53 million m ³ ²³	
	Wadi Shu'eib (Probably the waters on Nimrin mentioned in Isaiah 15:6) (Baly 1957:202). Dammed in 1969 with a storage capacity of 1.4 million m ³	Wadi Auja
	Wadi Kafrein (joins Wadi Abu Gherube) Dammed in 1967 with a storage capacity of 8.4 million m ³	Wadi Nueima (from Jericho to the Jordan River). This wadi drains the abundant spring waters from Jericho. In modern times it flows only with flash floods from rare winter storms as the population of Jericho fully utilizes the spring water (Har-el 1978:66)
	Wadi Hisban (joins Wadi Abu Gherube)	Wadi Qelt – rich in well springs (Har-el 1978:66)

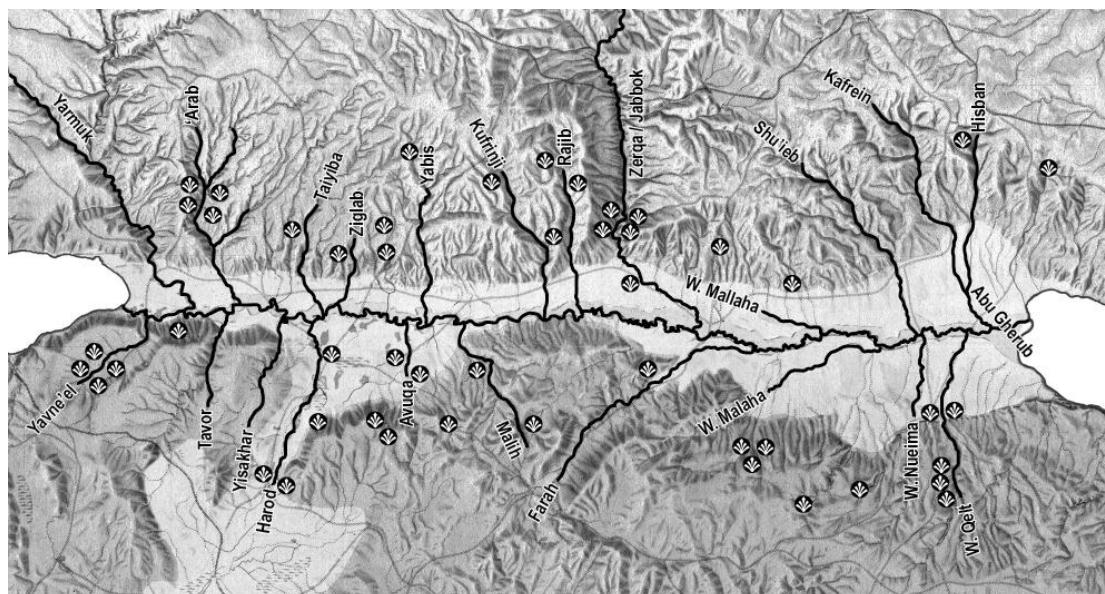


Figure 2.35: Rivers and springs of the past and present
Spring symbols are approximation of key cluster locations (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

²³ Google Earth provides detailed imagery of the Jordan Valley from 2004. The one exception is the Wadi Mallah, Karameh and Karameh dam area which is blocked out for security reasons.

Comparison of the size and discharge of the main wadis/tributaries into the Jordan River can be seen in the following chart published by Schattner in 1962 using data from 1939-1946 (Schattner 1962:24-35). Schattner's figures are similar (but slightly larger than those published by Ahmad [1989:7]) but are broken down by main wadis whereas Ahmad lists the outflow for the Yarmuk and Zarqa Rivers only and then groups all the other wadis together into one category.

Table 2.6: Comparison of the size and discharge of the main wadis/tributaries into the Jordan River 1939-1946 (Schattner 1962:24-35)

Major Tributaries	Drainage area (km ²)	Discharge (million m ³ per annum)*
Eastern side of the Jordan		
Yarmuk	4,920	480
Wadi el Arab	285	30
Wadi Ziqlab	111	12
Wadi el Yabis	114	10
Wadi Kufrinje	113	10
Wadi Rajeb	109	?
Wadi Zerqa	2960	60
Wadi Nimrin (W. Shu'eib)	186	10
Wadi Hisban & W. Kafrien (Abu Gherube)	281	6
Western side of the Jordan		
Nahal Tavor	214	6
Nahal Harod	163	5
Wadi Farah	232	17

*These figures are to be regarded as estimates, being based upon measurements covering 2-5 years and being carried out during several weeks only. It seems probable that long-range and systematic measurements would render values higher by 10-20% (Schattner 1962:26; cf. Van der Steen 2004:20-21.)

Besides the abovementioned and measured tributaries with perennial flow, there are/were a large number of smaller wadis with irregular flow. Some are fed by

springs and a larger number drain flood waters only after rain. It is these smaller wadis from the escarpment that erode the cliffs of the Qattara into a maze of gullies and ridges that makes this area impossible for north-south travel.

The erosive nature of these tributaries and their deposits of alluvial material into the Jordan cause the river to shallow and widen. These wide shallow segments of the river are natural fords for crossing. Although the course of the Jordan and its tributaries have changed throughout the centuries, fords (ancient and modern) are most likely to be immediately downstream of the junction of these rivers and wadis.

Each of the Jordan Valley tributaries has subsurface water traveling along its routes. The water level will vary in proportion to the overall regional water level. But even in dry seasons when the surface water is not running, there may be enough water to irrigate vegetation growing along the banks. This is most evident on the 'Plains of Moab' in the southern section where the watershed of the 'Slopes of Pisgah' feed the Wadis Hisbon and Kufrein. These two wadis join together in the Wadi Abu Gherube as they run across the Ghor to the Jordan River. Today, even in the heat of summer with dust blowing across the wadi beds, the Willow and Tamarisk trees stay lush and green, offering shade to Friday picnickers enjoying the Dead Sea.

Springs: There are a great number of springs along the base of the escarpments in the valley.²⁴ All but a few of the major springs are highly dependent/responsive to rainfall in the highlands. Both their flow and water quality are in proportion to the amount of rain in the highlands. The water quality between the springs varies greatly and does not necessarily correlate by region as sweet water and highly saline springs can be found in close proximity to one another. While some springs reflect the chemical content of the sediments from which they flow, others reflect no

²⁴ The 1965 Survey by Hunting Technical Services on East Bank Jordan Water resources for the Jordan government measured flow rates on 202 individual springs along the eastern escarpment and wadis (Hunting 1965: Vol. 5:3 and Appendix B).

relationship whatsoever as they channel through the aquifer (Wilson and Wozab 1954:175; Burdon 1954b:330-337; Hunting 1965 Vol. 6).

The springs of the last two centuries should be viewed as possible examples of Late Bronze Age spring location and distribution. Many of the springs are located on or near wadis. Some archaeological sites are located near current and historical springs (i.e. Tell es-Sultan/Jericho and Tell es-Sarum/Rehob). But since most springs appear to originate from highland participation and flow through various cracks in the aquifers (cf. Schattner 1962; Wilson and Wozab 1954) these underground channels would be highly vulnerable to change due to seismic activity.



Figure 2.36: The Spring of Harod

The Spring of Harod that feeds the Harod River into the Beth-shan Valley is a good example of the change of water flow over the past 100 years. The left hand photograph was taken between 1898 and 1914 (Photo: The American Colony and Eric Matson Collection 1932: 06984 www.lifeintheholyland.com). The right photograph was taken in the early 1960s (The David Bivin Collection db6704080804 www.lifeintheholyland.com). Photograph on the bottom was taken in 2009 (Odyssey Tours http://88011.org/trek_day_02.html Accessed on 14 November 2011).

Table 2.7: Key Springs of the Jordan Valley of the last two centuries (cf. Wilson and Wozab 1954; Jordan National Geographic Center Archaeological Map 1978; Hunting 1965 Vol.5; USGS 2007:2)

Northern Section	East side	West side
	'Ain Maquq in the escarpment northwest below Um Qeis	'Ain Um Hujel in the escarpment just opposite of the Yarmuk/Jordan junction
	'Ain Masil ed Dal ('Ain Zahar) in W. 'Arab	'Ain el-Muddu due west of Beth-shan
	'Ain Mimar in the escarpment just north of W. Taiyiba	Fari'a Spring flowing from the Gilboa Mountains has not been recorded to stop flowing. Summer flow averages 0.4 million m ³ . Winter flows ranged from 1.7 to 10.5 million m ³ depending on rainfall (USGC 2007:26)
	Ayn Zayib base of W. Ziglab	'Ain el Beida in southern Beth-shan Valley
	'Ain Tabiqa at Pella	Hot springs of Hamma el Malih in the southern Beth-shan Valley: From 1977-97 averaged between 0.26 to 2.5 million m ³ (USGC 2007:26)
		'Ain el Hamma in southern Beth-shan Valley
		Historical springs around Tell es-Sarum and Beth-shan
Central Section 'the Waist'		
	'Ain el Birka south side of W. Kufrinja	'Ain Makhruga on the northwest escarpment point of the W. Farah
	'Ain Sekhina in W. Rajib	
	'Ain Hadla on north side of W. Zerqa mouth	
	'Ain Hajjaj and 'Ain el Azab on south side of W. Zerqa mouth	
	Zerqa Hot Springs along the mouth of W. Zerqa (destroyed by canal building in 1830s)	
	'Ain Khanezir due south of Deir 'Alla	
Southern Section		
	'Ain Um esh Shaanir due east of	'Ain Fasayil (a series of springs flowing into modern Fatsa'el

	Damiyeh	opposite Salt on western side of the valley
	Ayn el-Howari ('Ain Bassat el Faras) at the base of the escarpment west of Salt.	'Ain Auja: flow in 1991, a dry year, was 3.2 million m ³ . In 1992, a wet year, flow was 18.5 million m ³ . Occasionally during the summer it ceases to flow (USGS 2007:2)
		'Ain Sultan near the base of Tell Sultan at Jericho (3.8 m ³ /min or 1000 gallons/min)(USGS 2007:2)
		'Ain Deir Hajla south of W. Qilt southeast of Jericho

Key Springs of Antiquity:

Jericho: 'Ain Sultan in Jericho is probably the most famous spring in the Jordan Valley. It is certainly one of the largest and most consistent. It is sometimes called 'Fountain of Elisha' after the account in II Kings 2:19-23:

One day the people of Jericho said, "Elisha, you can see that our city is in a good spot. But the water from our spring is so bad that it even keeps our crops from growing." He replied, "Put some salt in a new bowl and bring it to me." They brought him the bowl of salt, and he carried it to the spring. He threw the salt into the water and said, "The LORD has made this water pure again. From now on you'll be able to grow crops, and no one will starve." The water has been fine ever since, just as Elisha said (II Kings 2:19-23).

Today it has a flow rate of 650 m³/hour or 15,600 m³/day. The spring water drops about 50 meters in the first 1.6 kilometers (160 feet) in the first mile as it makes its way to the Jordan River through the Wadi Nueima 10 kilometers (6 miles) away, irrigating about 1,000 hectares (2,500 acres). In addition to Ein es-Sultan, there are at least three other springs north-west of Jericho, Dyuk, Nuimeh, and upper Wadi Qelt. These three wells have a combined estimated capacity of 759 m³/hour or some 18,000 m³/day (Saymeh, Ishaq & Alyatim 2010).

These springs have made Jericho an oasis of agriculture produce throughout history and contributed to it being called the City of Palms (Judges 3:13).

Fazael (Phasaelis) Springs: The Wadi Zenanir flows into Nahal Fatsael, near Tell Sheikh Dhiyab (a possible location for Biblical Ataroth of Joshua 16:5-7 and

excavated in 2000 to Iron Age level), providing a ridge route up to the western highlands. It has a series of springs (which the Ephraimites used as a route to Jericho (Joshua 16:5-7). The streams were developed in Roman times with a series of dams and aqueducts to the Jordan Valley

(cf. <http://www.biblewalks.com/Sites/FazaelBrook.html> accessed 3 September 2011).

Wadi Zerqa: A number of hot springs were in and around the mouth of the Wadi Zerqa. In 1832-40, Ibrahim Pasha ordered a canal to be dug in the area to carry water from the Zerqa to the agricultural fields and the springs ceased to flow (Van der Steen 2004:33 cf. Merrill 1881:193).

Beth-shan and Harod Valley: The Beth-shan Valley has many springs, where the hard limestone of the Gilboa Mountains and western escarpment are cracked. Many of the small wadis have perennial springs. The combined flow of the various springs is around 130 million m³ a year (Van der Steen 2004:41). The Hebrew University of Jerusalem Institute of Archaeology's 2003 report on Tell es-Sareem (Tell Rehob) gives examples of both a Late Bronze Age spring critical to the city as well as the migration of springs over the centuries:

Stratum D-10 is a layer of light yellow travertine, over 2 m thick, uncovered at the foot of the mound. In a trial trench excavated 20 m north of area D, this travertine layer was about 6 m deep. This stratum is void of finds, except for one Late Bronze Age carinated bowl. The travertine must have accumulated in a body of water – a small lake or pond – that existed at the foot of the mound during part of the Late Bronze Age and may have covered much of the present-day field. The presence of this pond raises questions as to possible tectonic changes which prevented the water from being drained, as it is today, into a brook that flows northeast to the Jordan River (<http://www.rehov.org/Rehov/Results.htm> Accessed July 8, 2011)

To the north of the mound there is a brook leading east. A spring at the brook, close to the north-eastern corner of the mound, was probably the main water source of the ancient city. Additional springs are to be found nowadays at short distances from the mound.

Porter traveling through the area in the 1890s described the springs and regions:

From the Fountain of Harod to Beisan, the modern representative of Beth-shan is a pleasant ride of about nine miles. The road leads down the valley of Jezreel, through fields and meadows of extraordinary fertility. The soil is rich and water abundant.... There are several large fountains in the valley which send copious streams to the Jordan. Owing to the abundant waters and the damming up of some of the streams, a large section of the valley round Beth-shan is a morass. The whole valley is among the most productive in Galilee (Porter 1889:193).

2.2.2.7 Flora and fauna

Human interaction/exploitation of the vegetation in the Jordan Valley and adjacent areas over the past thousands of years has left very little of the natural plant cover. Reconstructing the vegetation environment is therefore speculative. However, climatic conditions and archaeological remains help put together a general picture.

2.2.2.7.1 Flora

The vegetation of adjacent regions to the Jordan Valley is primarily dependent on rainfall. The Jordan Valley, lying in the rain shadow of the western highlands, receives very little rainfall and is dependent on ground water. The high water table in the Zor provides good conditions for riverine forest vegetation. Poplar and Tamarisk trees along with smaller shrubs grow densely in the Zor (Van Zeist 1985:200). Historically, this dense brush has been called the 'Jungle' or 'Thicket of the Jordan' and 'The Pride of the Jordan': 'If you stumble in safe country, how will you manage in the thickets by the Jordan?' (Jeremiah 12:5), 'From the thickets of the Jordan' (Jeremiah 49:19; 50:44), 'The lush thicket of the Jordan is ruined!' (Zechariah 11:3). In the Qattara zone of the Jordan Valley, there is no flora.

The condition of the southern Ghor (with an average precipitation of 200 mm) is primarily determined by the high salinity of the soil (the Zor is too deep a channel to be used in irrigation without some kind of pumping mechanism). The natural vegetation of this environment is characteristic of two main species of plants: *Ziziphus lotus*, a densely branched shrub, 1-2 meters high with small spines and edible fruits and *Retama raetam*, a broom-like shrub (Van Zeist 1985:200).

The northern Ghor (with average precipitation of 400 mm) and the alluvial pans of the wadis are dependent on water runoff from the highlands. Along the river banks,

Tamarisk trees grow. These areas have been highly cultivated. The eastern and western highlands with average precipitation levels of 400-600 mm are naturally covered by Mediterranean woods and shrubs. The variety of trees include *Quercus calliprinos* (evergreen oak), *Quercus ithaburensis* (tabor oak), *Pinus halepensis* (Aleppo pine), *Pistacia palaestina* (turpentine tree), *Styrax officinalis* (storax), *Amygdalus communis* (almond), and *Ceratonia siliqua* (carob tree). These trees with their open canopies permit a rich ground cover of low shrubs and herbaceous species (Van Zeist 1985:200-201).

Remains from Late Bronze Age excavations of charred seeds and charcoal show these areas were cultivated with barley, free-threshing wheat, linseed, chick-peas and lentils (Van Zeist & Heeres 1973:21-37). The charcoal remains of Deir 'Alla from the Late Bronze/Iron Age transitions give a large spectrum of wood use. The majority of charcoal remains come from poplar and tamarisk trees that would have been easily accessible from the nearby banks of the Jordan and Jabbok/Zerqa Rivers. However, oak and olive trees are also represented. Oak represented the smallest percentage of the four types of wood, but olive wood made up a larger percentage than either local poplar or tamarisk (Van Zeist 1985:203). The olive and oak samples represent interaction with at the least the eastern highlands of Upper Gilead or the Madaba Plateau, the closest source for these woods.

At Pella, located on the lower hills of the eastern escarpment in the north, charcoal remains from the Late Bronze Age include oak, willow, almond, hackberry and olive (McNicoll, Edwards, Hanbury-Tenison, Hennessy, Potts, Smith, Walmsley & Watson 1992:255). These woods are exclusively from the highlands. Although less surprising than Deir 'Alla due to Pella's location at the base of the escarpment, it still represents interaction from the Jordan Valley to the eastern highlands for building material and other wood resources. Remains of cultivated crops of barley, emmer, horse bean, grape, grass, bitter vetch, broad bean, chickpea and lentils were also found at Late Bronze Age II Pella (McNicoll et al 1992:255).

2.2.2.7.2 Fauna

The Late Bronze Age texts do not mention the animals of the Jordan Valley. The Pentateuch and the prophets mention wild beasts such as lions, leopards, bears and wolves living in the land as specific dangers as well as in metaphor (Exodus 22:31; Leviticus 7:24; 17:15; 22:8; 26:22; Jeremiah 5:6; Amos 5:19; Hosea 2:18, 13:7; Isaiah 11:6). 2 Kings 17:25 mentions lions in Samaria. Only the prophets Jeremiah and Zechariah makes a specific reference to lions in the Jordan Valley in a metaphor of salvation against an enemy who 'shall come up like a lion from the swelling of Jordan' (Jeremiah 49:19). 'Listen to the roar of the lions; the lush thicket of the Jordan is ruined!' (Zechariah 11:3). The prophet uses a popular fear of a lion entering a populated area, probably forced out of the forested area of the Zor by a flooding Jordan River to make his point. Some early Christian pilgrims made references to lions in the Jordan Valley, for instance, Abbot Daniel in 1100 and Poloner in 1421 (Smith 1974:316 quoting from the Palestine Pilgrims' Text Society).

The prophet Isaiah, in issuing judgment upon the nations of the east, uses a word picture from the wilderness. The wilderness or 'midbar' includes both the Judean Wilderness (with its border on the southwest of the Jordan Valley) and the surrounding regions east of Judah and the Negev (Baly 1957: 101-105):

Thorns shall grow over its strongholds, nettles and thistles in its fortresses. It shall be the haunt of jackals, an abode for ostriches. And wild animals shall meet with hyenas; the wild goat shall cry to his fellow; indeed, there the night bird settles and finds for herself a resting place. There the owl nests and lays and hatches and gathers her young in her shadow; indeed, there the hawks are gathered, each one with her mate (Isaiah 34:13–15).

Later in Isaiah 43, the prophet uses a similar metaphor to encourage the people of Jerusalem:

I will make a way in the wilderness and rivers in the desert. The wild beasts will honor me, the jackals and the ostriches, for I give water in the wilderness, rivers in the desert (Isaiah 43:19–20).

This gives a hint of some of the wildlife that could have populated the Jordan Valley during the Late Bronze Age.

In the 19th and early 20th centuries, wild boar and hyena existed in the valley and the eastern highlands. On April 14, 1848, the Lynch expedition reported 'fresh track of a leopard on the low clay-like margin, where he had come to drink. At another time, as we passed his lair, a wild boar started with a savage grunt and dashed into the thicket' and two days further downstream near Damiyeh, they spotted more leopard tracks (Lynch 1849:212, 226, 247). As late as the 1850s, leopard skins could still be purchased in the valley (Merrill 1881:204-205). Despite continuous human habitation of the Jordan Valley through the centuries, a population of predator cats existed. Tristram reported seeing a Syrian bear in the winter of 1898 at the mouth of the Jordan River at the Sea of Galilee (Tristram 1898:49). These animals would require a food chain of lesser animals to support them. Despite the human settlement in, and movement through, the Jordan Valley, the Zor of the Jordan River would have provided excellent habitation for the large predators in the Late Bronze Age as it did in the 14th and possibly 19th centuries AD.

The archaeological remains show that the inhabitants of the Jordan Valley in the Late Bronze Age ate or at least made grave offerings of sheep, goats, dogs, horses, donkeys, domesticated and wild pigs, camels, cattle (both western European and the Zebu from East Asia), foxes, red deer, the Mesopotamian fallow deer and gazelles. Bones of various rodents, birds, turtles and fish have also been found in Late Bronze Age II sites (Strange 2001:294; Van der Kooij & Ibrahim 1989:39-42).

2.3 HUMAN GEOGRAPHY

2.3.1 Settlements

Human settlements require a source of water, a source of food (agricultural soils and/or hunting grounds) and materials for building suitable shelters. The Jordan Valley provides these basics as well as additional benefits of connecting transportation routes for importing/exporting excess commodities.

There is a consensus among researchers that, in general, across the Levant the Late Bronze Age was a time of recession as the large fortifications of the Middle Bronze Age cities seem to have fallen into disrepair and the number of settlements

decreased (Baumgarten 1992:143-144). This conclusion is obvious when focusing on the highlands and the large increase in the number of Iron Age settlements compared to the number of Late Bronze Age settlements. The other evidence for this argument is the general lack of new large fortification structures at Late Bronze Age sites as compared to those found from the Middle Bronze Age. Baumgarten sums up much of these theories when he concludes that

... there is a definite decrease in occupied settlements in the Late Bronze Age from the previous Middle Bronze period. Surveys and excavations appear to confirm that the hill country region lacked a sedentary population except at a few major sites (e.g. Shechem or Tell Beit Mirsim). Many small and minor sites in the coastal region appear also to be abandoned, and very few new sites [e.g. Tell Abu Hawam] are founded (cf. Baumgarten 1992:143-150).

In Strange's analysis of the JADIS data (2001:295-299), using a broader geographic boundary for the Jordan Valley which included parts of the escarpment, he identified 124 Late Bronze Age sites. 101 of these sites continued from the Middle Bronze Age and only 23 were newly established sites. Strange concludes, in agreement with Mittmann, that in the larger geographic region of Jordan, the Late Bronze Age saw a slight decrease in population except in the central part of Jordan (Strange questions the data for this section) before an enormous increase of settlements in the Iron Age (Strange 2001:297; Mittmann 1970:256-64).

There is an assumption made in comparing the databases between the different periods that the number of sites equals changes in population. This is not necessarily so, as population could easily have stayed the same while spreading out into smaller settlements or grown larger but developed more intense urbanization. The databases do not take a standard approach to listing the size of a site.

A decline in Late Bronze Age population or, at least, city building, may be true for the Levant in general but locally in the Jordan Valley it may not be the case. Surveys of the Jordan Valley reflect this pattern, but not to such a degree as the surrounding regions. The 1987 Wadi Yabis Summary concluded that the Wadi Yabis, as well as the highlands in general, saw a decrease of settlement in the Late Bronze Age, but this was not so in the lowlands of the Jordan Valley (Mabry & Palumbo 1988: 287).

In compiling the multiple databases listed in the introduction, 96 Late Bronze Age sites were identified on the Jordan Valley floor (see Tables 2.9-11). The difficulties in compiling and cross referencing all these databases for a direct comparison of all Middle Bronze, Late Bronze and Iron Age sites is beyond the scope of this survey. A look at only the JADIS/MEGA-JORDAN database which encompasses the length of the Jordan Valley (eastern side only) shows the following number of sites from each period:

Table 2.8: Late Bronze Age sites identified on the Jordan Valley floor

Northern Section	Period	Number of sites
	Middle Bronze II	23
	Late Bronze	16
	Iron Age I	20
Central Section		
	Middle Bronze II	28
	Late Bronze	27
	Iron Age I	38
Southern Section		
	Middle Bronze II	5
	Late Bronze	7
	Iron Age I	9
Jordan Valley Total		
	Middle Bronze II	56
	Late Bronze	50
	Iron Age I	67

The actual difference between the number of sites in the Jordan Valley between the Middle Bronze Age II and the Late Bronze Age is less than one percent. The number of identified Late Bronze Age sites is growing as more excavations are penetrating the Iron Age levels. An example is Tell Hammeh (no. 72 on Figure 2.40) which was visited by three surveys: Glueck (1951:313), Gordon and Villiers (1983) and Ibrahim

(1988), each concluding that there was no Late Bronze Age evidence. But the small-scale excavation of 1996-97 by Van der Steen (2004:147-158) produced much Late Bronze Age material. Very few of the surveyed sites (listed on Tables 2.9-11) have actually been excavated and their period of occupation relies solely on surface surveys. This researcher suspects that the close ratio of sites from the various periods is because the Jordan Valley was a preferred place of settlement in each period and that the Jordan Valley was probably close to its support capacity throughout all three periods. One would expect that the northern section would have the most settlements in maintaining ratios to water and soil quality/quantities but the central 'waist' actually has more settlements. The greater number is almost exclusively in the Zerqa/Jabbok River alluvial pan. However, the majority of sites in the central section appear to be medium to small tells and settlements as compared to the larger tells in the north. Many of the 'newer' Iron Age sites in the central section are small settlements (cf. Savage & Falconer 2003:35-42; Kaptijn 2009) that could easily be explained as a dispersal of population from the larger 'cities or towns' as a large influx of new people came into them.

2.3.1.1 Settlement Sites

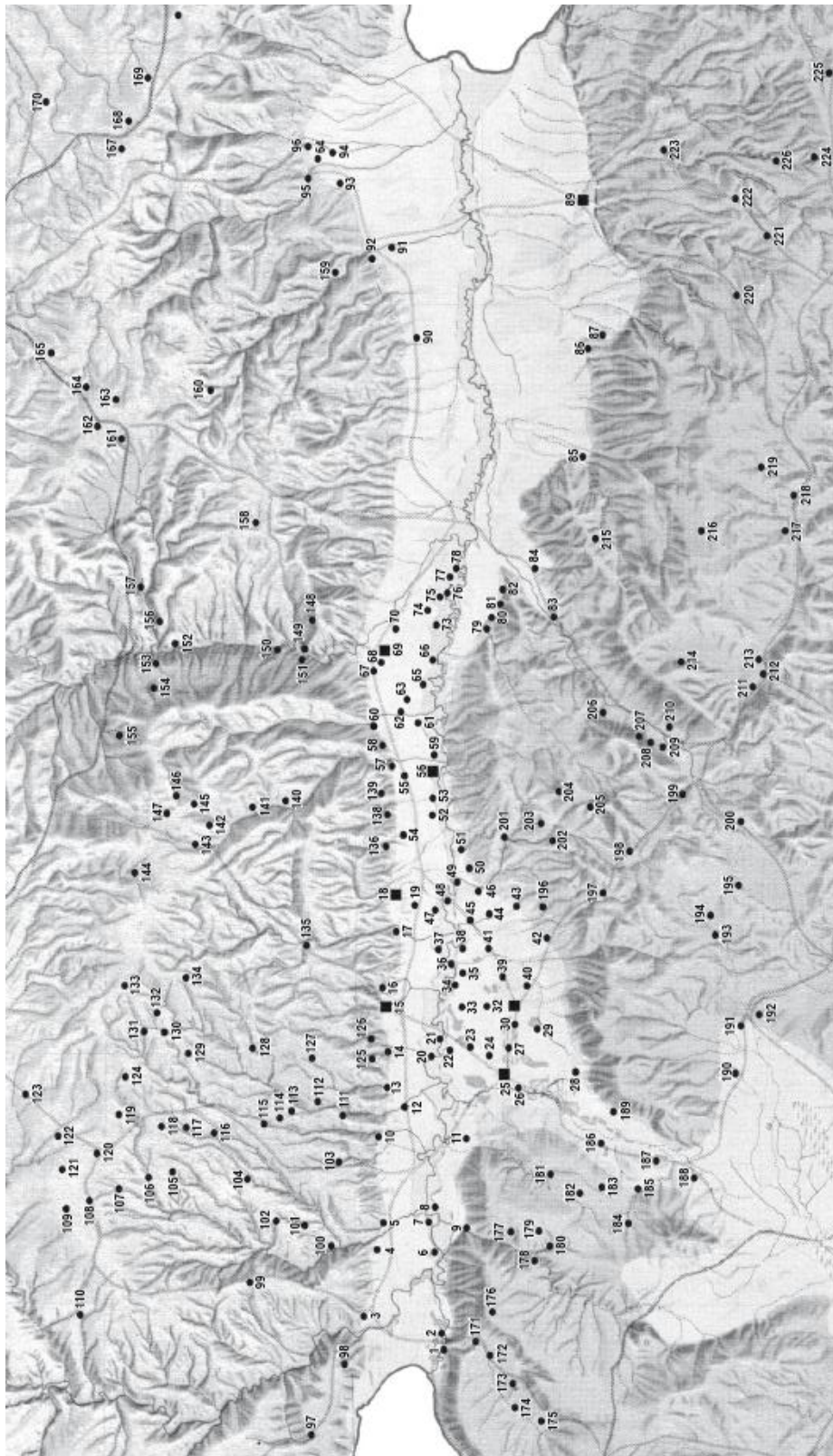


Figure 2.37: Late Bronze Age sites of the Jordan Valley

Site numbers correlate with Tables 2.9-15 for identification. See Figures 2.39-41 for enlarged sections of this map (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

This section will look at the Late Bronze Age sites identified in and around the Jordan Valley. From the locations of the various sites, inferences will be made according to their spatial distribution in regards to transportation routes and clusters of affinity between sites. The Jordan Valley and the Levant, as a whole, did not organize into political states/kingdoms until the Iron Age (cf. Levey 1995). In the Late Bronze Age this region's socio-political organization is usually referred to as 'city-states.' The term 'city-state' is not technically defined but is generally characterized as a local, independent political unit focusing on a central/capital city and its surrounding hinterland of fields and settlements, with limited regional political unity and influence (Savage & Falconer 2003:32; cf. Charlton & Nicholas 1997:1-14).

This concept of city-state places primary focus on key sites (often the largest or the one with most historical references) and downplays the surrounding settlements. Archaeological surveys (section 1.5.1.1) have provided records of many sites throughout the Jordan Valley.

The historical record, primarily the Amarna archives (section 3.2.1.9), give brief glimpses of the political landscape during this period. In general, the various rulers of these 'city-states' were in economic competition with each other and struggled to politically dominate another city-state. On occasions, they allied with one another to besiege a larger city or to defend themselves from one which was gaining too much power (Hamoht and Pella against Rehob and Beth-shan, see 3.2.2.2.1; the Lab'ayu Affair, Figure 3.8). The leaders of these cities usually carried the title of 'mayor' or less commonly, 'rulers,' 'kings,' or 'princes' in the Amarna correspondence (Moran 1992:xxxii; Weinstein 1981:12-17). Although the Egyptian literature appears to have the Levant divided into some administrative organization with certain cities designated as administrative and garrison centers, it does not appear that they or the local rulers organized the Canaanite cities into any larger political entity. Egypt was only interested in maintaining political allegiance in order to keep the trade routes open in their favor, secure tax revenue and conscript labor (Na'aman 1981:177; Weinstein 1981:12-17).

'A fundamental tenet of locational analysis holds that settlements cluster around important geographical features, local resources or prominent centers' (Hodder & Orton 1976:85). This is shown in the settlement clusters of the Jordan Valley, the largest clusters being centered on both the fertile river plains of Beth-shan and Zerqa/Jabbok and the east-west routes into/out of the valley. Each cluster has a major site surrounding by many smaller sites. This is most prominent in the Zerqa triangle. In the northern section, there are several major sites in close proximity which, the historical records show, competed and conflicted with each other (section 3.2.2.2). Still, people living in clusters or 'nodes' on the landscape that are closer to each other tend to interact more frequently. Settlement clustering undoubtedly was molded by a variety of social and economic factors, among which the spatial definition of polities must have figured prominently (cf. Savage & Falconer 2003:35). These groups infer a unity of culture and social interaction between the northern and central sections of the Jordan Valley. The settlements in the south are much more dispersed due to the soil and water conditions as well as being off the major international movement tracks.

In Savage and Falconer's spatial and statistical inferences of Late Bronze Age polities in the southern Levant, they concluded that there were four political units in the Jordan Valley and two in the western highlands. The two in the western highlands were centered on Jerusalem and Shechem. In the Jordan Valley, the most northern cluster, between the Sea of Galilee and the Nahal Tavor is actually centered on a Tell Mukharkhash (#180 on Figure 2.39) (possible Anaharath) located near the crest of the Yisakhar Plateau. The other three are all centered on the valley floor: Rehob in the Beth-shan valley, Deir 'Alla in the Zerqa triangle and the cluster in the south focusing on the Moabite plain but including Jericho (Savage & Falconer 2003:38). With recent excavations on the Plains of Moab (Tells Hammam, Kufrien, Iktanu and Nimrin) (see 4.2.3.2 – 5) a clear cluster pattern of several small cities centered around one large site (Tell Hammam) that expands Savage & Falconer's suggestion of city-state in this area is emerging (Collins 2007:5). This cluster has escaped inclusion into earlier studies on Middle Bronze city-states simply because excavations at these sites are so recent (Collins 2009:24). Currently the ceramic and stratigraphy of the all

the sites in this southeast cluster show only a Middle Bronze Age occupation with no Late Bronze Age strata (Collins 2010:5). Therefore, the presence of a Late Bronze Age city-state in this southern section must be held back while the Middle Bronze Age city-state is explored further. These inferred political units and the other 18 that Savage and Falconer inferred for the whole southern Levant, are in close agreement with earlier studies by Na'aman (1988a) and Finkelstein (1996).

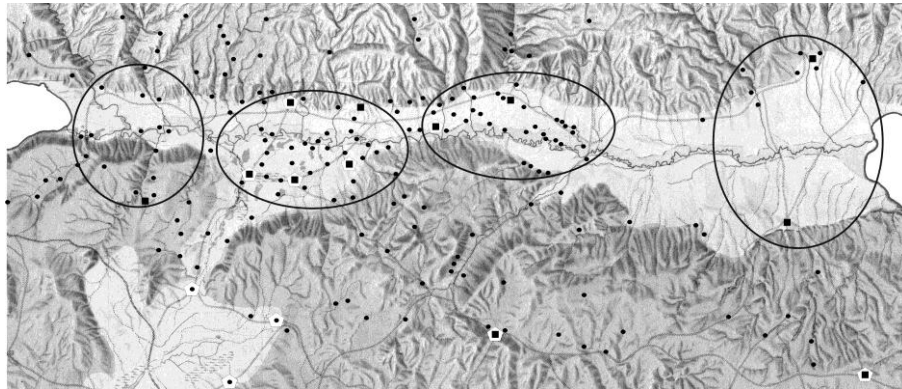


Figure 2.38: Savage and Falconer's city-states of the Jordan Valley

Not emphasized on this map are the city-states of Jerusalem and Shechem that extended to the edge of the southern and central sections of the valley (2008:38) (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

The preceding inferences are based solely on spatial and statistical analysis of site locations. Although by the nature of site requirements and human settlement patterns, these clusters reflect a general picture of geographic units that make up the Jordan Valley, they do not appear to take into account more local geography. To include the entire Beth-shan area and eastern side between Pella and Abu Karaz in one polity is hard to support when considering geography and history. This chapter has already made the case that the Jordan River was a physical barrier for at least several months of each year. The archaeological sites of Tell es-Sarem (Rehob), Tabaqt Fahl (Pella), Abu Kharaz and more distant Tell Sa'idiyeh, are all large tells that could be considered a central site or 'city-state' in their own right. Beth-shan, although slightly smaller than nearby Tell es-Sarem, could also be considered a candidate. Beth-shan is usually relegated to the role of Egyptian garrison/administrative city as opposed to a more 'independent' Canaanite city-state. The historical records of the Amarna letters and Seti I show that these large cities (i.e. Pella and Hamath besieging Rehob and Beth-shan, see 3.2.2.2) were often

at war with one another. When faced with a larger outside ‘foreign’ force, these cities may have easily identified with one another (as in the large Canaanite forces opposing Thutmose III [see 3.2.1.4] or Deborah [see 3.3.5.3]) but, on a regional and local level, probably had separate identities. In the south, the large sterile fields separated by the Jordan River probably kept Jericho and the sites of the eastern Plains of Moab as separate entities. The Biblical account of Jericho tolerating the Israelites on the Plains of Moab and pursuing the spies only to the river fords, supports Jericho’s identity of being limited to the west side of the valley (see 3.3.4).

The spatial clusters do suggest a series of well-integrated city-state polities headed by clear capital communities. The cluster with Rehob (or Pella) and Anaharath, represent heavily populated polities with modestly sized centers (this author would include the Zerqa Triangle as the most clear model of a single cluster). Savage and Falconer conclude that the southern Levant consisted of three categories of city-state clusters:

- The Coastal Plain, with the largest political and economic centers but with a ‘hodge-podge of polities with highly variable structures’ (Savage & Falconer 2003:38-42).
- The western Hill Country with fewest, ‘most dispersed and with consistent evidence of less settlement integration’ (Savage & Falconer 2003:38-42).
- The Jordan Valley which ‘features settlement patterns most consistent with a series of highly integrated polities or city-states, and sub-regional political coherence (Savage & Falconer 2003:41-42). The Jordan Valley appears to be a much more unified unit than the other parts of the southern Levant in the Late Bronze Age.

The following tables attempt to make a comprehensive list of Late Bronze Age sites in the Jordan Valley and the neighboring highlands by combining all the databases and surveys listed in section 1.5.1.1. This first section consists of sites located on the valley or immediate foothills of the escarpment. The maps introducing each section are followed by a table keyed to the site numbers on the map. Site locations are an approximate and not exact location. The bibliography section on Tables 2.9-13 have

not necessarily been used or checked in this thesis unless cited elsewhere. The bibliographic references in these tables were taken from the various data bases and included to facilitate future research.

2.3.1.1.1 Northern section

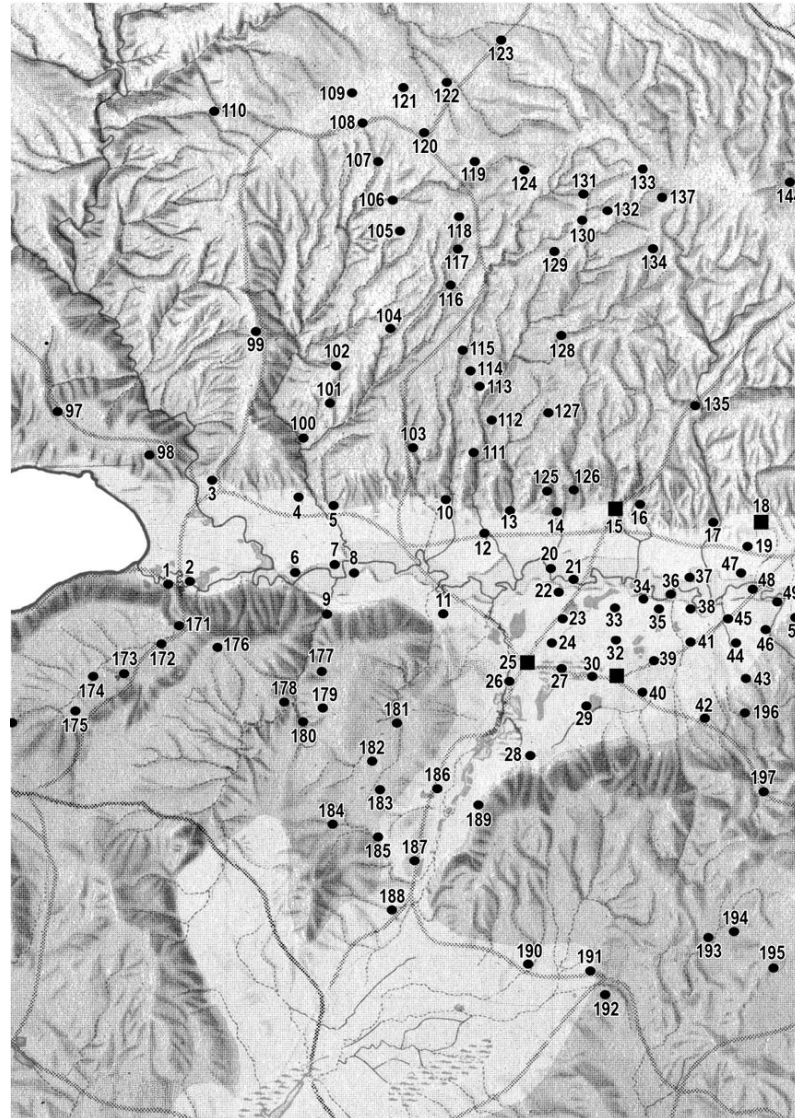


Figure 2.39: Sites of the Northern Jordan Valley and highlands
See Table 2.9 below for site references (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Table 2.9: Archaeological sites of the Northern Jordan Valley (see Figures 2.37 and 2.39 for site reference numbers)

	Name	Alternate Name	Grid	Database	Bibliography²⁵
1	Beit Jinn		1967 2357		Saarisalo 1927:37-38
2	Ubeidiya, Tell				Aharoni 1979:177
3	Tabaq	ain al Tapaqa	202205	MEGAJ 2777	
4	Shunah esh-Shemali	esh Shuneh, Tell	2022002	MEGAJ 9699	
5	Sakhineh, Tell es-		2070 2218/2022025	MEGAJ 4732	Ibrahim et al. 1976
6	Khirbet Dalhamiya	Khirbet Buk'ah	203 228		Saarisalo 1927:71
7	Dhahhak		2040 2222		Yalq. Hap.:1402
8	Kittan	Qittan, Musa, Tell; Sheikh Qasim	204 221	3768-0	Bergman & Brandsteter 1940-1941:86; Ha. Arch. 1975: 54-55
9	site at 2022 2259		2022 2259		Maisler & Yeivin 1943-1944:18
10	Refeif		2021035	MEGAJ 4716	
11	Yissakhar, Tell	Khirbet Zab'a	2004 2174		Bergman & Brandsteter 1940-1941:87; Yalq.Hap.:1418
12	Arba'in	el Arbain, Tell	2021001	MEGAJ 2854	
13	Iraq er-Rahdan		2021007	MEGAJ 9675	
14	Hammeh 03		2020038	MEGAJ 4663	
15	Pella	Tabaqt Fahl	2075 2065	MEGAJ 2705	Smith & Potts 1992:39; Bourke 1997
16	Abu el-Khas		2020003	MEGAJ 7705	

²⁵ Not all of the bibliography references in the bibliography column of this table (2.9) or in tables 2.10-13 have been checked or listed in the bibliography of this thesis. The citations listed in this column were taken from the various data bases referenced in the introduction to compile these tables and included here to aid future use of these tables.

17	Hejeijah, Tell			MEGAJ 4637	
18	Abu el-Kharaz	Abu el Kharaz, Tell	2020006/2062 206	MEGAJ 9583	Fischer 1983:282-23; 1997: 132-135; 91,93,94,97,06
19	Meqbereh	el Maqbarah, Tell	2020005	MEGAJ 4654	
20	Midrash, Tell	Madrassa, Tell	202 211		Bergman & Brandsteter 1940-1941:89- 90
21	site at 2034 2103		2034 2103		Yalq. Hap.:1419
22	Dabbat el Khurrei'		2024 2103		Yalq. Hap.:1419
23	Nimrud, Tell		2022 2100		Bergman & Brandsteter 1940-1941:89
24	Eshtori, Tell	Maliha, Tell	199 211		Bergman & Brandsteter 1940-1941:89- 90
25	Beth-shan, Tell	Husn, Tell	1975 2123		Mazar 1997
26	Zehara, Tell		1929 2133		Yalq. Hap.:1414
27	Nissa, Tell	Manshiya, Tell	1989 2105		Yalq. Hap.:1418
28	Sokha	Shauk, Tell	193 211	DAAHL 3421	
29	Khirbet Farwana		196 207		Yalq. Hap.:1420
30	En Ha-Naziv		1974 2086		Yalq. Hap.:1420
31	Rehov, Tell	Sarem, Tell es-	1970 2070		Zori 1962:176- 178; Mazar 1999
32	Zenedm, Tell	Sheikh es Simad, Tell	199 209		Bergman & Brandsteter 1940-1941:89
33	Masad, Tell	Kefer Rupin; Hajj Mahmud	2027 2073		Zori 1962:159- 161
34	Artal, Tell	Sheikh Dawud, Tell	2030 2077		Bergman & Brandsteter 1940-1941:86
35	Qitaf, Tell		202 207		Bergman & Brandsteter 1940-1941:86
36	Khirbet Hajj Mahmud		2027 20073		Yalq. Hap.:1423

37	Hayyat		2020019	MEGAJ 9592	
38	site at 2034 2069		2034 2069		Yalq. Hap.:1423
39	Ro'el, Tell	Ra'yan, Tell	1991 2049		Bergman & Brandsteter 1940-1941:89
40	Tulul Thaum		196 205		Bergman & Brandsteter 1940-1941:89
41	Kefar Qarnayim, Tell	Abu Faraj, Tell	1994 2036		Bergman & Brandsteter 1940-1941:89
42	Qa'un, Tell			DAAHL	
43	Deir, Tell	Deir, Khirbet Ed-	1992 1995	DAAHL	Mittmann 1970:132
44	Alya, Tell		1998 2007		Yalq. Hap.:1422
45	Tirat Zevi		1998 2031		Yalq. Hap.:1422
46	Shalem, Tell	Radgha, Tell	199 200		Yalq. Hap.:1422
47	Mu'ajamen, Tell			MEGAJ 9595	
48	Jamma'in, Tell		2022 2016		Yalq. Hap.:1424
49	Mudawwar				
50	Sakut, Tell			DAAHL	

2.3.1.1.2 Central section

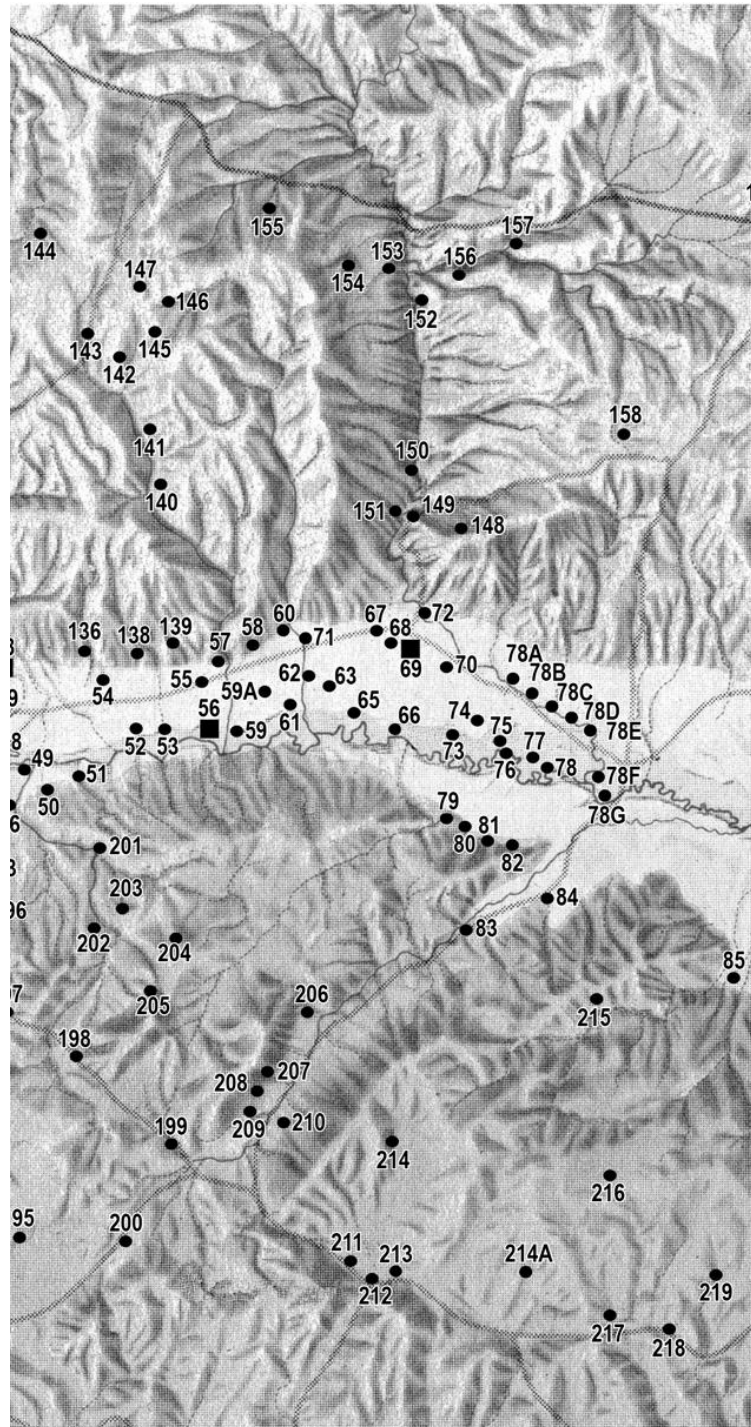


Figure 2.40: Sites of the central Jordan Valley and highlands
See Table 2.10 below for site references (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Table 2.10: Archaeological sites of the central Jordan Valley (see Figures 2.37 and 2.40 for site reference numbers)

	Name	Alternate Name	Grid	Database	Bibliography ²⁵
51	Abu Sus, Tell		2030 1978	DAAHL	De Contenson 1964:41; Zori 1977:38-39
52	Abu Hamid	Abu Hamid, Tell	2019001	MEGAJ 6592	
53	Subeireh North		18062	MEGAJ 9540	
54	Maqbarat es-Sleikhat		2019075	MEGAJ 4650	
55	Keriemeh al Gharbi		2018059	MEGAJ 2846	
56	Sa'idiyeh, Tell es-		2018001/2046 1861	MEGAJ 2655	NEAEHL 4:129801300; Tubb 1988
57	Keraymeh	Kuraymah/ Kureimah North		MEGAJ 2846	Van der Steen 2004:164
58	Khafseh	Kurayman/ Kureimah South	2018031	MEGAJ 9523	
59	Feshush	Saidiyeh Village	2018061	MEGAJ 9537	
59A	Buweib			MEGAJ 9535	Van der Steen 2004:195
60	Qos			MEGAJ 4603	Ibrahim Sauer & Yassine, 1976:50, 56
61	Kharabeh, Tell el-		205 182	MEGAJ 9536	Yassine, et al. 1988
62	Ghazaleh, Tell	Ghazala		MEGAJ 2745	
63	Mazar	el Mazar, Tell	2018002	MEGAJ 2662	AJFR: 38; Ibrahim et al. 1976; Tassube 1984:89
64	Hammam			MEGAJ 2691	Baly 1957:202
65	Nekheil (South)	en Nakheel south, Tell; Nekhayl South	2018054	MEGAJ 2755	
66	Abu Nijrah, Tell		2017036/205 179	MEGAJ 9501	Yassine, et al. 1988
67	Qa'adan North	abu el Qurdan north, Tell	2017012	MEGAJ 2757	
68	Qa'adan South	abu el Qurdan south, Tell	2017012	MEGAJ 2758	Yassine, et al. 1988

69	Deir Alla	Dir 'Alla, Tell	2017001/2088 1782	MEGAJ 2688	NEAEHL I:339-340; Franken 1964
70	Argadat, Tell el-		205 175/2017038	MEGAJ 4592	Yassine, 1988; Van der Steen 2004:185
71	Ammata			MEGAJ 9512	Van der Steen 2004:195
72	Tell Hammeh			MEGAJ 2748	Van der Steen 1997 2002: 165-66, 189- 90; 2004:147-158
73	Rabi'	Located due west of Akhsas (could make one site)	2017063	MEGAJ 9508	Van der Steen 2004:185
74	Akhsas	Ekhsas, Khisas, Rabi'ah	2017008	MEGAJ 9493	
75	Qatarett es- Samra	Katerat Samra	203 174	MEGAJ 4342	Leonard 1979:63
76	Samra		2017008	MEGAJ 9488	
77	Qataret- Samra III	Katerat Samra III	2017041	MEGAJ 4341	
78	Ayn Bassah	Basseh		MEGAJ 9092	Yassine 1988:10-197
78A	Meidan			MEGAJ 9491	Van der Steen 2004:178
78B	Rikabi			MEGAJ 9486	Van der Steen 2004:179
78C	Asiyeh			MEGAJ 9485	Van der Steen 2004:180
78D	Bashir			MEGAJ 3117	Van der Steen 2004:184
78E	Zakar			MEGAJ 2754	Van der Steen 2004:181
78F	Damiyeh Jadideh			MEGAJ 4585	Van der Steen 2004:185
78G	Damiyeh			MEGAJ 2750	Van der Steen 2004:185
79	Sheikh Saleh		2008 2139		Zori 1962:142
80	Huzuq Musa				
81	Na'ajeh 4				
82	Wadi Umm Kharubeh 1				

2.3.1.1.3 Southern section

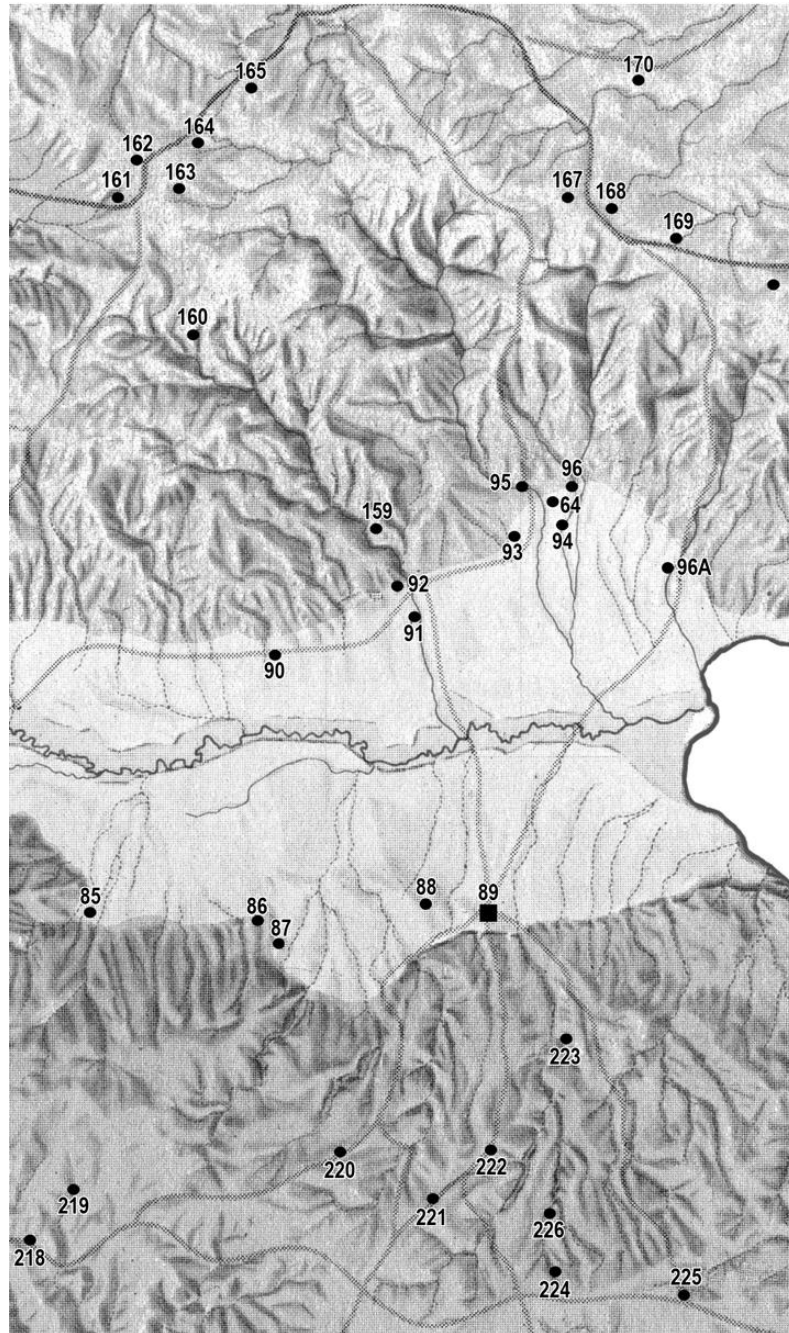


Figure 2.41: Site of the Southern Jordan Valley and the highlands
See Table 2.11 below for site references (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Table 2.11: Archaeological sites of the Southern Jordan Valley (see Figures 2.37 and 2.41 for site reference numbers)

	Name	Alternate Name	Grid	Database	Bibliography²⁵
83	Khirbet Shuweiha		1856 1787		Jaros and Deckert: No. 23
84	Shimadi, Tell	Simadi, Tell			
85	Sheik Dhiab, Tell		1908 1615		Glueck 1951:404-416
86	Yafit North				
87	Yafit 7	Yafit North			
88	Gilgal				
89	Jericho, Tell	Sultan, Tell	1921 1419		Bienkowski 1986
90	Ala Safat			MEGAJ 9468	
91	Nimrin	Nimrin, Tell	2014027	MEGAJ 2689	Yassine 1988:10-197
92	Mustah, Tell	Mistah		MEGAJ 2687	Yassine 1988:10-197
93	Kufrein		2113005	MEGAJ 10285	
94	Jazayir		2113037	MEGAJ 5090	Yassine 1988:10-197
95	Tahun	et Tahuneh, Tell	2113031	MEGAJ 2747	Yassine 1988:10-197
96	Matabi	samiya	2113022	MEGAJ 5086	
96A	Iktanu			MEGAJ 10269	Hesban Survey Ibach 1987

Following are Late Bronze Age sites of the eastern and western highlands. They will be used in inferring a Late Bronze Age road system integrating the Jordan Valley with the highlands (section 2.3.2.2) as well as selective archaeological sites in the highlands that also show evidence of the integration of the Jordan Valley and the highlands (Chapter 4).

2.3.1.1.4 Eastern highlands

Table 2.12: Archaeological sites of the eastern highlands (see Figure 2.37 for site reference numbers)

	Name	Alternate Name	Grid	Database	Bibliography ²⁵
97	Sarj, Tell			DAAHL	
98	Khan al 'Aqaba			DAAHL	
99	NN/Wadi Arab Survey Site 046		2222004	MEGAJ 11511	
100	Zer'ah	Zira'a	2122028	MEGAJ 10613	
101	Bond		2122034	MEGAJ 10615	
102	Qaq		2122084	MEGAJ 10641	
103	al Sareej	Sreq		MEGAJ 2873	
104	Umm El-Ghozlan		2122076	MEGAJ 5356	
105	Jamuta				
106	Jijjeen			MEGAJ 2891	
107	Som			MEGAJ 2887	
108	Samoqa			MEGAJ 11579	
109	Dabulya			MEGAJ 5966	
110	Gweilbeh	Abila		MEGAJ 2762	
111	NN/Wadi Ziqlab Survey Site 037		2021008	MEGAJ 9676	
112	NN/Wadi Ziqlab Survey Site 034		2121025	MEGAJ 5287	
113	NN/Wadi Ziqlab Survey Site 033		2121024	MEGAJ 10552	
114	NN/Wadi Ziqlab			MEGAJ 5285	

	Survey Site 30				
115	Rukheim	Khirbet arkheen	2121015	MEGAJ 2817	
116	NN/Wadi Ziqlab Survey Site 030		2121021	MEGAJ 5285	
117	Sibya		211077	MEGAJ 10581	
118	NN/Wadi Ziqlab Survey Site 018		2121009	MEGAJ 10545	
119	Kufr Yuba			MEGAJ 11498	
120	Irbid		229 218	MEGAJ 2811	Lenzen et al. 1985; Leonard 1987b:261
121	Sal			MEGAJ 2786	
122	al Bayad			MEGAJ 2824	
123	Husn, Tell el-		2329 2110	MEGAJ 2681	Leonard 1987a:359;Lenzen & Knauf 1987:61; Sauer 1986:6
124	Ham			MEGAJ 11484	
125	Hammeh 08		2020043	MEGAJ 9609	
126	Hammeh 19		2020054	MEGAJ 9615	
127	Deir Qequb	Deir Gegoob	2120054	MEGAJ 5248/2890	
128	Deir Abu Sa'id		2121065	MEGAJ 5306	Mittmann 1979:3
129	NN/Wadi Ziqlab Survey Site 091		2120006	MEGAJ 10469	
130	Gbub south-north			MEGAJ 5233/5272	
131	Harqala			MEGAJ 5880	
132	Beida	WADI Yabis 1		MEGAJ 5879	

133	Ya'amun			MEGAJ 2823	
134	Birqish			MEGAJ 5234	
135	Khirbet Meryameen	Miryamin		MEGAJ 2866	
136	Heneideh		2019074	MEGAJ 4649	
137	Sahra	Sabra		MEGAJ 6699	Mittmann 1979:3
139	Hissou		2018029	MEGAJ 4613	
140	Mansura	Mansur	2119048	MEGAJ 10431	Mittmann 1979:3
141	Safit	Safi, Zafit	2119029	MEGAJ 10421	
142	Ajloun				
143	Muzabal	Ajlun		MEGAJ 5863	
144	Sakhra			MEGAJ 12605	
145	Hamid	Arbua, Salus	2219043	MEGAJ 5864	Mittmann 1979:3
146	Suf			MEGAJ 5858	
147	Dahr el- Medinal			MEGAJ 7710	
148	Umm El- Idham	Izam	2117014	MEGAJ 10372	
149	Dhahab Gharbi			MEGAJ 2709	Van der Steen 2004:187
150	Ghreimun		2217002	MEGAJ 5880	
151	Dhahab Sharqiyeh			MEGAJ 2751	
152	Rehil			MEGAJ 11368	
153	Amame			MEGAJ 6652	
154	Kweim			MEGAJ 6651	Mittman 1979:3
155	Jerash			MEGAJ 58418	
156	Mayita			MEGAJ 11355	

157	Shubeil			MEGAJ 11359	
158	Khabyeh			MEGAJ 5790	
159	Magfiat N. 98		2114025	MEGAJ 5105	
160	Salt			MEGAJ 10358	
161	Umm ed- Dananir		2272 1660	MEGAJ 11326	McGovern 1986:61- 63
162	Hawayah			MEGAJ 11324	
163	Qasir			MEGAJ 11325	
164	Henu			MEGAJ 11327	
165	Safut			MEGAJ 11320	
166	Al (off map)			MEGAJ 9141	
167	Hesbon Regional Survey 128			MEGAJ 11267	
168	Hesbon regional Survey 132			MEGAJ 3264	
169	Umm es Sareb				
170	Umeiri			MEGAJ 2677	

2.3.1.1.5 Western highlands

Table 2.13: Archaeological sites of the western highlands (see Figure 2.37 for site reference numbers)

	Name	Alternate Name	Grid	Database	Bibliography ²⁵
171	Sheikh Muzeighit		1998 2307		
172	Khirbet 'Ayun Hore'a		197 234		Zori 1977:45- 46
173	Yin'am, Tell	Na'am, Tell en-; Yanoam	1983 2354		NEAEHL 4:1515-1516; Zori 1977:44- 45
174	Site a 1962 2371		1962 2371		Yalq. Hap No. 1583:745

175	Adami, Tell				Aharoni 1979:177
176	Hadatha	En Hadda, Tell	1963 2322		Saarisalo 1927:59-62; Zori 1977:142
177	Bira		1974 2237		Zori (sic):96
178	Site at 1968 270				Zori 1977:124-27; Yalq. Hap.:1400
179	Khirbet Mughaiyir	H. Zeev	1953 2276		Zori 1977:149-51; Yalq. Hap.:1399
180	Mukharkhash, Tell	Rekheshe, Tell			Aharoni 1979: 168; 188; Albright 1923:12; Saarisalo 1927:68069; Zori 1977:116-20
181	Yubla		194 220		Zori 1977:90- 91
182	Na'ura		1873 2244		Zori 1977:57- 59
183	En Ha-Yadid	Ein el Jirani; 'Ein el Malhah	1996 2218		Yalq. Hap.:1400
184	Site at 1992 2218				Zori 1977:98- 99
185	Khirbet Es Safsafa	Endor			Zori 1977:113-114
186	Shelavim, Tell		2885 2161		Zori 1977:83
187	Khirbet Buleiq		1863 2216		Zori 1977:57- 59
188	Shunem				
189	Sheikh Hasan, Tell	Old Tell Yosef	1882 2152		Zori 1977:26- 27
190	Jenin, Tell				
191	Khirbet Najjar			DAAHL	
192	Qitneh			DAAHL	
193	Bull Site			DAAHL	

194	Khirbet Sheikh Safiryyan			DAAHL	
195	Kebarrah			DAAHL	
196	Hamme, Tell	el-Hamme, Tell; el-Hama, Tell; Hammah	1973 1977	DAAHL 501	NEAEHL 2:561; Albright 1926:43; Aharoni 1979:177
197	Miqwaq B			DAAHL	
198	Munthar A			DAAHL	
199	Far'ah, Tell el-		1821 1881		NEAEHL 2:439
200	Khirbet Kheibar			DAAHL	
201	Hulu, Tell	Khirbet el-Hulu; Abu Sifry, Khirbetel-Hilu; el-Hilu, Tell; Sheikh Sifry, Tell	1978 1926	DAAHL	Zertal 1996:283-285
202	Khirbet Mhallal			DAAHL	
203	Khirbet Hamamat			DAAHL	
204	Yusef, Khirbet	Khirbet Umm el-Hosr, Sheikh Hasn	1948 1879		Zertal 1996:317-319
205	el-Bird	Ras Hamud; Ras Hamud		DAAHL	
206	Wadi el-'Aris				
207	el-Maqbara A	see Dorsey			
208	el-Maqaber	see Dorsey			
209	Maqbarat en-Nuseiryye				
210	Miske, Tell	Miska, Tell; el-Qaziya,	1873 1825		Glueck 1951:422

		Tell; el Kahiyeh, Tell			
211	Khirbet Huweiha	Kefer Kuz	1855 1785		Campbell 1968:26; Kuschke 1953:15
212	Balata	(ancient Shechem)		DAAHL	NEAEHL 4:1352; Finkelstein 1997:798-799
213	Tananir			DAAHL	
214	Beit Dajan	Ras Diyar	185 178		Jaros & Deckert: No. 24; Campbell 1991
214A	Shurrab				Campbell 1991
215	Jebel el Mahjarah 2	Tana Tahta			Campbell 1991
216	Khirbet El 'Urme		1805 1726	Campbell 1968:38-40; Kochavi: 168	Finkelstein 1988; Campbell 1991
217	Einabus				
218	Abu Zarad				
219	Shiloh				Finkelstein 1988
220	Khirbet Er-Rahaya				
221	Khirbet Marjame			DAAHL 810	
222	Ein Samiya				
223	Marjameh			DAAHL 810	
224	Beitin			DAAHL	
225	Jerusalem				
226	Khirbet Maqatir				Wood 2009

2.3.1.2 Place names from historical texts in the Jordan Valley

Three methods are generally used in attempting to identify a site with an historical location:

1. Historical and topographical information from the written source itself;
2. Analysis of the modern site's name, preservation, transference and development;
3. Artifactual evaluation from the site (Aharoni 1979:123-125; MacDonald 2000: 13-19).

The majority of the sites listed above have only been surveyed and registered as containing Late Bronze Age artifacts. In this section, a review of locations (cities or areas) that are mentioned in the historical texts reviewed in Chapter 3 are paired with likely candidates of known archaeological sites or general locations. Although only Late Bronze Age sites have been identified in the previous section, some Iron Age sites will be mentioned here due to the variance in dating both the historical records and the archaeological evidence and especially due to the lack of excavations at many Jordan Valley sites and due to different surveys of the same site reporting different occupation periods.²⁶ Egyptian literature from the Middle Bronze Age (i.e. The Execration Texts) and Iron Age (Shishak's topographical list) mention cities in the Jordan Valley. The Execration Texts mention cities, like Pehel (Pella) which were clearly known and interacted with during the Late Bronze Age. Others, like Hadasha (no. 54 of Shishak's Karnak temple list), meaning 'new city' and located in the Zerqa Triangle (Ahituv 1984:108) might not have been known.

The following two charts outline the historical cities with their main archaeological site candidates and the archaeological sites with their suggested historical identity.

²⁶ I.e. Tell Iktanu; Glueck (1951:394-95) reported evidence for occupation from Middle Chalcolithic to Iron Age II but the East Jordan Valley Survey reported the earliest occupation in the Early Bronze Age with no Late Bronze Age occupation; Wadi 'Azeimeh, a candidate for Beth-jeshimoth, Glueck reported Iron Age I sherds (1951:402) but Yassine, Sauer and Ibrahim reported none (1988:193)

Egyptian references in the following section have been limited to the 18th and 19th Dynasty.

Table 2.14: Historical cities and their suggested archaeological site(s) (see Figure 2.37 for site reference numbers in parentheses)

Valley Section	Historical City	Suggested Archaeological Site(s) with Map number ²⁷
Northern Section		
	Pelha	Pella/Tabaqat fahil (15)
	Abel-meholah (Judges 7:22)	Tell Maqlub; Abu Kharaz (18); Ras Um Harrube; Tell Abu Sifri/Khirbet Hilu (201); Tell Hammeh (72); Tell Abu Sus (51)
	Jabesh-gilead (Judges 19-21)	Abu Kharaz (18); Tell Meqbereh (19); Tell Maqlub; Dayr Halawa
	Yanoam	Tell 'Abeidiyeh; Tell Shihab
	Hammat/Hamath	Tell Hammeh (in the Beth-shan Valley)
	Beth-shan (Joshua 17:16; Judges 1:27)	Tell Beth-shan (25)
	Emeq, The Valley	Beth-shan, Harod and Jezreel Valleys
	Rehob	Tell Sarem (31)
Central section		
	Zaphon (Joshua 13:27; Judges 12:1)/Sabuma	Tell 'Ammata (71); Tell Sa'idiyeh (56); Tell Qos (60)
	Zarethan (Joshua 3:16)	Tell Sa'idiyeh (56) Tell Umm Hamad; Qarn Sartabeh
	Adam (Joshua 3:14-17; Judges 7:24)	Tell Damiyeh (Tell Adam)(78G); Tell Damiyeh Jadideh (78F)
	Penuel (Judges 8:8-9,17)	Deir 'Alla (69); Tell Dhahab Garbiyya or Shariqiyya (151)
	Succoth (Numbers 33:6; Joshua 13:27; Judges 8:5-17)	Tell Akhsas (73); Tell Dayr 'Alla (69)
Southern section		

²⁷ If a site does not have a site number corresponding to Map 2.37, 39-41 it is not listed in the data bases as having a Late Bronze Age occupation, is beyond the east/west boundaries of the map or is a general area as opposed to a specific site.

	Beth-nimrah (Numbers 32:3)	Tell Nimrin (91); Tell Bleibil
	Beth-haran (Joshua 13:27)	Tell Iktanu (96A); Tell Rama
	Beth-peor (Joshua 13:20)	‘Ain Musa
	Gilgal (Joshua 4:20; 5:2-9; 9:6; 10:6-15; Judges 2:1; 3:19)	Area of Galgala/Galgul
	The slopes of Pisgah, field of Zophim and the Valley of Moab (Numbers 21:20; Deuteronomy 3:17; 4:49; Joshua 12:3; 13:20)	Wadis Shu’eib, Kafrein and Hisban; Wadi ‘Uyun Musa
	The Plains of the Jordan, Moab and Jericho (Numbers 22:1; 26:3)	The valley floor of the southern section.
	Abel-shittim (Numbers 25:1-9; 26; 27:12-23)	Tell Kefrein (93); Tell Hammam (64)
	Beth-jeshimoth (Joshua 12:3; 13:20)	Tell Azeimeh, Rujm, Wadi ‘Azeimeh and Khirbat Sweimeh
	Jericho (Numbers 22:1; 26:3; Joshua 5:13; 16:1; 18:12; Judges 3:13)	Tell Sultan (89)

Table 2.15: Archaeological sites and their suggested historical identity/identities (see Figure 2.37 for site reference numbers in parentheses)

Valley Section	Archaeological Site	Suggested Historical Identity
Northern Section		
	Pella/Tabaqat fahil (15)	Pelha
	Abu Kharaz (18)	Abel-meholah; Jabesh-Gilead

	Ras Um Harrube	Abel-meholah
	Tell Abu Sifri/Khirbet Hilu (201)	Abel-meholah
	Tell Abu Sus (51)	Abel-meholah
	Tell Maqlub	Abel-meholah; Jabesh-Gilead
	Tell Hamme (72)	Abel-meholah
	Tell Meqbereh (19)	Jabesh-Gilead
	Dayr Halawa	Jabesh-Gilead
	Tell Shihab	Yanoam
	Tell 'Abeidiyeh	Yanoam
	Tell Hammeh	Hammat/Hamath
	Beth-shan (25)	
	Beth-shan, Harod and Jezreel Valleys	Emeq, The Valley
	Tell Mukharkhash (180)	Anahart (Egyptian)/Anaharath (Biblical)
	Tell Sarem (31)	Rehob
Central section		
	Tell 'Ammata (71)	Zaphon (Biblical)/Sabuma (Egyptian)
	Tell Sa'idiyeh (56)	Zaphon (Biblical)/Sabuma (Egyptian); Zarethan
	Tell Qos (60)	Zaphon (Biblical)/Sabuma (Egyptian)
	Qarn Sartabeh	Zarethan
	Tell Umm Hamad	Zarethan
	Tell Damiyeh (Tell Adam)(78G)	Adam
	Tell Damiyeh Jadideh (78F)	Adam
	Deir 'Alla (69)	Penuel; Succoth
	Tell Dhahab Garbiyya or Shariqiyya (149)	Penuel

	Tell Akhsas (73)	Succoth
Southern section		
	Tell Nimrin (91)	Beth-nimrah
	Tell Bleibil	Beth-nimrah
	Tell Rama	Beth-haran
	Tell Iktanu (96A)	Beth-haran
	‘Ain Musa	Beth-peor; Valley of Moab
	Area of Galgala/Galgul	Gilgal
	Wadis Shu’eib, Kafrein and Hisban	The Slopes of Pisgah, Field of Zophim and the Valley of Moab
	The valley floor of the southern section.	The Plains of the Jordan, Moab and Jericho
	Tell Kefrein (93)	Abel-shittim
	Tell Hammam (64)	Abel-shittim
	Tell Azeimeh	Beth-jeshimoth
	Rujm	Beth-jeshimoth
	Wadi ‘Azeimeh	Beth-jeshimoth
	Khirbat Sweimeh	Beth-jeshimoth
	Tell Sultan (89)	Jericho

Details of historical places and archaeological site candidates:

2.3.1.2.1 The northern section of the Jordan Valley

Anahart (Egyptian)/Anaharath (Biblical) was in the territory of Issachar (Joshua 19:19) and listed on the Karnak reliefs of Thutmose III (#52) and Seti I (#31) and Amenhotep II’s annals. Identified with Tell Mukharkhash, it is 8 kilometers southeast of Mount Tabor (Ahituv 1984:59; Aharoni 1967:212-215; Aharoni 1979:168). This large site controlled access to the Jordan Valley from the top of the Nahal Tavor from the Yisakhar and Kokhav Plateaus.

Jabesh-Gilead is first mentioned in the period of the Judges when the western tribes of Israel kidnapped four hundred virgins for the men of Benjamin (Judges 21:8-14). At the death of Saul and his sons, the men of Jabesh-Gilead travelled one night from their city to Beth-shan in order to give their bodies a proper burial (I Samuel 31:11-12). Therefore, Jabesh-Gilead should be located within a four to fifteen hour march from Beth-shan. The name of the city clearly puts it in the region of Gilead. However, Gilead is a large region both north and south of the Wadi Zerqa. The name, Jabesh-Gilead, is usually translated as 'well-draining soil of Gilead' or 'dryness of the ground' (ABD, s.v. 'Jabesh-Gilead'). This meaning is in the modern Arabic name of Wadi Yabis. This, along with Eusebius's labeling of Jabesh-Gilead in the vicinity of the sixth mile marker from Pella on the Roman road to Jerash (Onomasticon 110:11-13), has most scholars identifying candidates for the city in the escarpment along the Wadi Yabis (i.e. Tell Maqlub or Dayr Halawa). However, a few individuals (Glueck 1951: 268-75; 1968: 133-135; McKenzie 1965:407; Baly & Tushingham 1971:442) suggest that Jabesh-Gilead could have been situated on the twin sites of Abu Kharaz or Tell Meqbereh (300 meters apart, 18 and 19 on Figure 2.40) in the Jordan Valley. Both these sites have Late Bronze and Iron Age occupation and provide a view of Beth-shan, 14.5 kilometers (8.5 miles) to the northwest. These two Jordan Valley sites cannot be ruled out, but with the authority of Eusebius and its name designation placing it firmly in Gilead and outside the control of the Philistines at Beth-shan, candidates further up in the escarpment are more probable sites for Jabesh-Gilead.

Abel-meholah: When Gideon set the Midianites to flight, they 'fled as far as Beth-shittah toward Zererah, as far as the border of Abel-meholah' (Judges 7:22). In Solomon's time, Abel-meholah was associated with Beth-shan under one official by the name of Baana: 'Baana the son of Ahilud in Taanach, Megiddo, and all Beth-shan that is beside Zarethan below Jezreel and from Beth-shan to Abelmeholah, as far as the other side of Jokneam' (1 Kings 4:12). Later, it was the home town of the prophet Elisha (1 Kings 19:16). Abel-meholah translates as 'meadow of dancing.' Abel meaning a meadow or well watered land (ABD 1996, s.v. 'Abel-meholah') suggests that the city was located on fertile land of the Ghor, south of Beth-shan.

Scholars have put forth a number of sites on both the east and the west side of the Jordan Valley. On the eastside, Glueck (1951:213-17, 220-23; 1968:136-137) suggests Tell Maqlub and Noth (1959:52-60) suggests Abu Kharaz for similar reasons to those that other scholars suggest that these sites may be Jabesh-Gilead. Assuming that Gideon's and Solomon's Abel-meholah are the same place, this means that Solomon's fifth district (governed by Baana) would have been all on the west side of the Jordan River. This point could easily be understood as a point before the Midianite flight crossed the Jordan River and word was sent to Ephraim to block the fords (Judges 7:22-24). So the candidates on the west of the valley have a stronger case. Of the four western candidates, Ras Um Harrube (in the hills above the north bank of Wadi Farah), Tell Abu Sifri/Khirbet Hilu (at the junction of Wadi Helwah and Wadi Malih north of Wadi Farah), Tell Hamme (at the mouth of the Wadi Losm, 196 on Figure 2.39), only one is located in the Jordan Valley, Tell Abu Sus (15 kilometers (9.3 miles) south of Beth-shan at the southern edge of the Beth-shan Valley, number 51 on Figure 2.40 (ABD 1996, s.v. 'Abel-meholah). Tell Abu Sus, is the best candidate as the others sites are too far up the escarpment to be in line with the flight of the Midianites (cf. MacDonald 2000:206; ABD 1996, s.v. 'Abu Sus').

Pelha, Pella: Pelha of the numerous Middle Bronze (Execration Texts) and Late Bronze Age texts²⁸ are generally accepted to be the same as Tabaqat fahil (Ahituv 1984:153-54; Glueck 1968:142-144). In the earlier Egyptian texts (Thutmose III), Pelha is connected with Hazor and Chinnereth. In Seti I's reign it is connected with Beth-shan, Rehob and Hamath. The name Pelha means horse or donkey and may suggest that the city was known as a center for trade in this kind of animal. Papyrus Anastasi IV suggests that the city produced chariot parts (Ahituv 1984:154; Smith 1987:54 cf. Judges 4-5 Canaanite forces in the area had chariots).

Yanoam, listed in Seti I's victory stele found at Beth-shan, is one of the cities he defeated along with Pehel (Pella #15) and Hamath (Tell Hammeh) when relieving the

²⁸The Karnak reliefs of Thutmose III #33, Haremheb no. 13, Seti I no. 49, Ramessess II, no. 26, Seti I's El-Qurne, no. 15, Seti I Larger Beth-shean Stele, Amenhotep III's Soleb no. 9 and Papyrus Anastasi I.

siege at Rehob (Tell Sarum #31) and retaking Beth-shan (Tell Husn #25). Pharaoh Merneptah also claimed to have destroyed Yanoam along with the cities of Ashkelon, Gezer and the people of Israel (see 3.2.2.5). The two leading candidates for Yanoam are: Tell 'Abeidiyeh (Garstrung 1931:73; Aharoni 1979:177; Kitchen 1993:19) located in the Jordan Valley at the southern tip of the Sea of Galilee, and Tell Shihab (Na'aman 1977) up the eastern escarpment on the Plains of Bashan. Seti I's victory stele from Beth-shan when relieving Rehob and Beth-shan from Hamath and Pehel favors the location of Yanoam being in the Jordan Valley or at least within a day's march of Pharaoh's army (16-32 kilometers [10-20 miles]):

[t]hat day one came to speak to his majesty as follows: "The wretched enemy that is in the town of Hamath has assembled a great host of people to himself. He has seized the town of Beth-shan. Then, in league with them of Pehel, he does not permit the prince of Rehob to come outside. Thus, his majesty sent the first army of Amon, "Mighty of Bows," to the town of Hamath, the first army of the Re, "Great of Valour," to the town of Beth-shan, and the first army of Sutekh, "Strong of Bows," to the town of Yanoam. It happened in the space of one day that they were overthrown by the glory of his majesty (ANET 1955:253).

It appears more likely that Yanoam is up on the eastern plateau as EA 197 lists Yanoam amongst other cities, all on the Bashan or Damascus Plain (Ahituv 1984:199). The topographical lists of Amenhotep III and Ramesses II also group Yanoam in a Syrian context (Na'aman 1977:169). An undated fragment of a stele from Seti I was also found at Tell Shihab (Kitchen 1969:17). Although it is unknown when the stele was erected, Seti I's first campaign led to some kind of occupation of the site during his eleven-year reign. In the Karnak inscription from Seti I in the second register (after the Pehel glyph), a battle is shown that could match the general terrain of Tell Shihab, strengthening the case for identifying Tell Shihab with Yanoam over Tell El-'Abeidiyeh in the Jordan Valley (Rainey & Notley 2006: 86, 92-93).

Hammat/Hamath is usually associated with Tell Hammeh, located 26 kilometers (16 miles) southeast of Beth-shan (Albright 1926:42-42; Ahituv 1984:112). It is listed in Ramesses II's Karnak reliefs (XIII:50; XIV:53; XXIV:27), Seti I's El-Qurne reliefs (no. 14 on both the northern and southern sphinx), Wadi Abbad and the Larger Beth-shan

stele (Ahituv 1984:112). During Seti I's reign, Hammat allied with Pella to defeat Beth-shan and besiege Rehob (ANET 1955:253).

Beth-shan is universally accepted as being located at Tell Husn (Albright 1926:42-43). Beth-shan is listed in the Amarna Letters (EA 289) and Seti I's El-Qurne (southern sphinx), Abydos reliefs and his large Beth-shan stele, Ramesses II's Karnak relief (25), Papyrus Anastasi I (22:8) and in Joshua 17:11. After Thutmose III conquered the city, no local king was mentioned in the literature. This has led many to conclude that it became an Egyptian military and administrative center (cf. Ahituv 1984:78-79).

Dagal and *Dagal'il* are two neighboring cities from Papyrus Anastasi I (21:8) which Ahituv assumes are in the Jordan Valley due to their order in the topographical listing (Ahituv 1984:86). *Tarqa'ilu* is mentioned by the satirical scribe of Papyrus Anastasi I in the vicinity of Beth-shan, Rehob and the fords of the Jordan. No candidates have been put forth for this city.

Emeq is listed in Thutmose III and Shishak's topographical lists in Karnak (107 and 65). This term represents the Beth-shan, Harod and Jezreel Valleys (Ahituv 1984:93).

In the Egyptian literature, Papyrus Anastasi I (22:8-23-1) is the only Egyptian reference to the *Jordan River*. This particular context is near the fords of Beth-shan.

Jarmuth, *Mt. Jarmuth*, *Yarmuta* are listed in Seti I's Smaller Beth-shan Stele. This site is equated with Jarmuth of Issachar (Joshua 21:29) located on the Ramat Issachar ridge just north of the Harod Valley. Seti I defeated the 'Apiru who were raiding in the area (3.2.2.2.1).

The Egyptian literature mentions three locations by the name of *Rehob* (often written as Rehov) and the Bible mentions two. The first Biblical reference is Rehob of Numbers 13:21 which is the northern limit of the Israelite spies and the resettlement of the Danites (Judges 18:28) which is north of the Sea of Galilee. The second is given to the tribe of Asher and is associated with the territory between Aphek and Sidon (Joshua 19:28, 30) towards the coast. These two references coincide with two of the Egyptian locations. The third Egyptian Rehob that does not coincide with the Biblical

references is in the Beth-shan Valley, the Rahabu in letter No. 2 from Ta'anach (15th century BCE). It is listed in Seti I's larger Beth-shan Stele associated with Pehl, Hamat and Yanoam. In Papyrus Anastasi I, Rehob is associated with Beth-shan and the crossing of the Jordan River. This Rehob is generally identified with Tell Sarem, 5 kilometers (3 miles) south of Beth-shan (Aharoni 1979:144, 157,177). The identification of Tell Rehob (in Arabic, Tell es-Sarem) with the Rehob of the Egyptian texts was based on the preservation of the name at the nearby Islamic holy tomb esh-Sheikh er-Rihab (1 kilometer [.6 miles] south of the mound) and on the existence of a Jewish town with the same name (Rohob) near the mound during the Byzantine period. This settlement is mentioned by Eusebius as being located on the fourth mile from Beth-shan.

Tell Rehob (Israel Map ref. 197.207; UTM Grid 873.594), one of the largest mounds in Israel, is located in the center of the Beth-shan Valley, in an alluvial plain. It is about 6 kilometers (3.8 miles) west of the Jordan River, 3 kilometers (1.8 miles) east of the Gilboa ridge and 5 kilometers (3.1 miles) south of Tell Beth-shan, dominating the north-south road along the Jordan Valley. Its total size is 10.2 hectares (20.5 acres) (102 dunams, including the slopes), and it is divided into an upper and lower mound. The closest water source is a spring in the brook close to the northeastern corner of the mound. Additional springs are to be found at short distances from the mound. The reason for the city's importance was not only that it guarded the southern approaches to the Harod Valley but that it also controlled roads that led to three fords of the Jordan River and from there to important centers in Transjordan.

2.3.1.2.2 Central section of the valley

Of the four cities mentioned in Joshua 13:37 (Beth-haram, Beth-nimrah, Succoth and Zaphon), *Zaphon/Subuna* is the most northern. Zaphon was a border town of Gad, taken from Sihon king of Heshbon (Joshua 13:27) and is the city where the Ephraimites confronted Jephthah after the battle with the Amorites (Judges 12:1). Ahituv identifies *Sabuma* from Ramesses II's time with Zaphon (Hebrew Sapon) but does not equate a modern site with it (Ahituv 1984:203-204). Albright also equates Sabuma from EA 274 with Biblical Zaphon (Albright 1943: 9, 15-17; 1973:107). An

interesting point regarding Albright's identity of Sabuma from EA 274 over the identities of Rainy and Zadok (who locates it somewhere in the Shephelah on geopolitical grounds that the writer of EA 274 also complains of 'Apiru activity in the Shephelah in EA 273, see 3.2.1.9.6; Zadok 1986:180), is that it makes EA 274 the only reference of the Jordan Valley showing knowledge and concern about the 'Apiru. Glueck also equates Sabuma of EA 275 with Biblical Zaphon but he considers Tell Qos (no. 60) as the best candidate site (Glueck 1951: 352-353; 1968:142-143). Kraeling (1956:72-73) locates Sabuma in the middle of the Jordan Valley. Although the Jerusalem Talmud (Shebi'it 1x2) identifies Zaphon with Ammata (Tell 'Ammata), Tell Sa'idiyeh (56 on Figure 2.40) is the most popular (Simons 1959:299-300; Abel 1967:70, 448; Aharoni 1979: 34, 288, 443; Tubb and Chapman 1990: 94). Both sites have Late Bronze and Iron Age occupation.

Zarethan is a city beside Adam (Joshua 3:16). During Israel's monarchy, it is described as being close to Beth-shan (1 Kings 4:12) and bordering on the area near Succoth (Tell Akhsas or Deir 'Alla) on 'the plain of the Jordan' where some of the temple utensils were cast (1 Kings 7:46). Adam is usually identified with Tell Damiyeh (see Adam in this section). Therefore, Zarethan is probably located between Tell Damiyeh and south of Beth-shan. The two primary candidates on the east side of the Jordan are Tell Sa'idiyeh (Glueck 1951: 340; Tubb & Chapman 1990:94) and Tell Umm Hamad (Aharoni 1979: 34, 284). On the west side of the Jordan, Abel (1967:450-51) proposes Qarn Sartabeh, opposite Tell Damiyeh. None of the sites have a distinct advantage over the others for being Zarethan.

Adam is known as the place where 'the waters rose up in a heap' (Joshua 3:16) when Joshua led the Israelites across the Jordan. Ahituv identifies it with the 56th city listed on Shishak's Karnak relief (1984:50). It was located by the strategic fords crossing the Jordan (Judges 7:24) where the Wadis Farah and Zara join the Jordan River and due east of the Mamluk Bridge ruins and fords (2.2.2.6.1.ii; Figure 2.34). Tell Damiyeh (Tell Adam) and Tell Damiyeh Jadideh both preserve the ancient name Adamah and are the best candidates for Adam (MacDonald 2000:52; Kaptijn 2009:401; ABD 1996, s.v. 'Adam'). Both tells are located 5.8 kilometers (3.5 miles) south of Bassah (#78 on Figure 2.40) and 1.7 kilometers (1 mile) west-east of each

other. Tell Damiyeh (JADIS 2016001) is located in the Zor east of the Damiyeh (Damiyeh) bridge ruins. Damiyeh Jadideh (JADIS 2016020) is located on the slopes of the Qattara due east along the banks of the Zerqa River. Late Bronze Age sherds have been identified on both (Glueck 1951:330-331; Ahituv 1984:50; Van der Steen 2004:185). A limited excavation on Tell Damiyeh's southern slope was conducted in 2006 (Kaptijn & Petit 2006:95-96)(see 4.2.2.2). A Canadian University may be excavating at Damiyeh in the near future.²⁹

A few scholars place *Penuel* at Deir 'Alla (Van der Kooij 1986; Franken 1997 s.v. 'Tell Deir Allah'; MacDonald 2000:148-149). Penuel is often paired with Mahaniam (listed in Shishak's topographical list, no. 22) due to the narrative of Jacob returning to Esau in Genesis 32:25-32, leading to the two other candidates for Mahaniam which are further up the Wadi Zerqa. Tell Dhahab Garbiyya or Shariqiyya (149 and 151 on Figure 2.40) are the most popular candidates for Mahaniam. Whichever one is considered Mahaniam (usually Dhahab Garbiyya) (Ahituv 1984:134, 154), the other is often called Penuel (cf. MacDonald 2000:140-142). Both Dhahab Shariqiyya and Deir 'Alla match the geographical locations of the narrative of Gideon pursuing the Midianites (west to east after crossing the Jordan [Judges 8:8-17] and then returning to discipline the elders of Penuel). All three sites have established Late Bronze and Iron Age occupation. Tell Dhahab Garbiyya's candidacy continues to grow as a joint Swiss-German and Jordanian team started focusing on the site in 2005, expanding its Late Bronze Age occupation (Luck 2011).

Moses allotted *Succoth* (where Esau built a house and made stalls [booths] for his cattle) (Genesis 33:17) to Gad (Joshua 13:27). Gideon asked for supplies from Succoth in his pursuit of the Midianites and punished them for not giving assistance (Judges 8:5-16). During the reign of Solomon, the bronze vessels of the temple were cast in the clay on 'the plain of the Jordan ... between Succoth and Zarethan' (1 Kings 7:46). Succoth was therefore located on the eastern side of the river in the southern

²⁹ Personal conversations with Hussein Jarrah, Director for Jordan Valley, Jordan Department of Antiquities, May 28, 2010.

section of the valley. If the river bed running on the north side of Tell Deir 'Alla is ancient branch of the Zerqa River, Tell Deir 'Alla (Succoth) would have marked the northern boundary of a region designated by the Zerqa/Jabbok River (see Zerqa River section 2.2.2.6.1). If the cities of Joshua 13:37 (Beth-haram, Beth-nimrah, Succoth and Zaphon) are listed in a south to north order as part of the border of Gad, then Succoth was located north of Tell Nimrin near the Zerqa/Jabbok River. Shishak's march through the Jordan Valley suggests that Succoth was west of Tell Dayr 'Alla (Mazar 1957). The Jerusalem Talmud describes Succoth as being just over a kilometer east of Dayr 'Alla (Franken 1997: s.v. 'Tell Deir Allah'). The two best candidates for Succoth are Tell Akhsas (73 on Figure 2.40) and Tell Dayr 'Alla (69 on Figure 2.40). Glueck suggests Tell Um Hamad and Tell Qa'dan (67 or 68 Figure 2.40) also in proximity to Dayr 'Alla. Glueck (1951:347-348), Simons (1959:231-232) and Aharoni (1979:442) prefer Deir 'Alla. Abel (1967: 470), Franken (1979) and MacDonald (2000:143-144) prefer Tell Akhsas. Both sites have Late Bronze and Iron Age occupation. Tell Akhsas matches Pharaoh Shishak's and the Talmud's descriptions better as well as preserving the meaning of its name, 'mound of booths', in the Arabic (Abel 1967:470).

2.3.1.2.3 Southern section of the valley

Beth-nimrah and *Beth-haran* were two of the fortified cities of Sihon king of Heshbon that were given to Gad (Numbers 32:3, 36). They are also associated with Succoth and Zaphon as an inheritance of Gad in the Jordan Valley (Joshua 13:27).

Nimrah translates as 'leopard' (ABD 1996, s.v. 'Nimrah') and could be a reference to the wildlife of the Zor.³⁰ There are two candidates for Beth-nimrah: Tell Nimrin (91 Figure 2.41) and Tell Bleibil (an Iron Age site immediately northeast of Mustah [92 Figure 2.41]). Glueck (1951:124), Simons (1959:122), Noth (1968:240) and Aharoni (1979:112-114) prefer Bleibil as the most likely candidate. But earlier, Merrill

³⁰ In light of the debate over the identity of Sapuna being located in the Shephelah or in the Jordan Valley (associated with Biblical Zaphon and Tells Sa'idiyeh or Qos) it would be worth exploring any relationship between Queen NIN-UR.MAH. MEŠ (the writer) of EA 273/274, whose title is translated as 'Lady of the Lions' (Albright 1943:17).

(1881:384-86), Conder, Kitchener, Palmer & Besant (1883:402-404) and more recent scholars such as Butler (1983:165) and MacDonald (2000:114), prefer Nimrin. Both sites control access to the Wadi Shu'ieb but Nimrin is on the valley floor (controlling the valley floor routes) as well as maintaining the toponym Nimrah.

If the cities of Joshua 13:37 (Beth-haram, Beth-nimrah, Succoth and Zaphon) are listed in a south to north order as part of the border of Gad, then Beth-haran would be located on the Plains of Moab, south of Nimrah. Eusebius' Onomasticon 48:13-15 and the Talmud (Neubauer 1868:247) report that Beth-haran has been 'modernized' to Beth Ramtha and then changed again to Livias and is located near the Jordan River. Glueck (1951:394), Albright (1926:49) and Aharoni (1979:432) identify Tell Iktanu as Beth-haran. Tell Iktanu is one of the larger sites in the area, located on a large, isolated hill in front of Wadi Hisban and a possible route up to the Madaba Plateau. Haran translates as 'house of the high place' (Marshall, Millard, Packer, & Wiseman 1996, s.v. 'Haran') and may support this location. The other main candidate for Beth-haran, Tell Rama, is 2.5 kilometers (1.5 miles) west northwest of Iktanu, also located on a high natural hill on the Ghor. Conder et al (1883:402), Noth (1935:249), Simons (1959:122) and MacDonald (2000:122) favor Tell Rama over Iktanu as a candidate for Beth-haram.

In 'the valley opposite *Beth-peor*' (Deuteronomy 3:29), Moses reviewed the exodus journey from Sinai to the Plains of Moab. Moses was also buried 'in the valley in the land of Moab opposite Beth-peor' (Deuteronomy 34:6). While camping at Abel-shittim (Tell Hamman, see Abel-shittim) and Beth-jeshimoth (Tell 'Azeimeh, see Beth-jeshimoth) at Beth-peor, the Israelites worshipped the Canaanite god Baal at Peor (Numbers 23:28; 25:18). Peor is 'in the land of King Sihon of the Amorites, who reigned at Heshbon' (Deuteronomy 4:46) and is thus connected to the slopes of Pisgah, Abel-shittim and Beth-jeshimoth. Beth-peor should be located around these three sites. MacDonald, as well as most other scholars, has looked for Beth-peor along the upper slopes or on the Madaba Plateau. 'Ain Musa, in the wadi just north of Mt. Nebo (Ras Siyagha) is the most prominent candidate (cf. MacDonald 2000:138-139).

The Slopes of Pisgah, Field of Zophim and the Valley of Moab: Section 2.2.2.4.3 identified the Slopes of Pisgah as including Wadis Shu'eib, Kafrein and Hisban. Pisgah is located in the region of Moab that 'overlooks the Wasteland' (Numbers 21:20) of the southern valley, 'opposite Jericho' (Deuteronomy 34:1) and allows a view that includes both the Jordan and Gilead (Deuteronomy 3:27). 'The field of Zophim' where Balaam made sacrifice before cursing/blessing the people of Israel was at the top of Pisgah (Numbers 23:14) opposite Jericho. Mount Nebo was at 'the top of Pisgah' (Deuteronomy 34:1) and provided a view of the whole valley. 'The valley lying in the region of Moab by the top of Pisgah that looks down on the desert' (Numbers 21:20) is probably Wadi 'Uyun Musa, immediately north of the ridge of Ras Siyagha (MacDonald 2000:79, 86) and is part of the Wadi Hisban watershed. The activity of the Biblical narrative on these slopes before descending into the Jordan Valley adds strength to the inferences of routes Q and R (Figure 2.47) that a road system existed on these slopes connecting the Jordan Valley and the Madaba Plateau (see routes Q and R of 2.3.2.2.4).

The Plains of the Jordan, Moab and Jericho: The southern end of the Jordan Valley is the widest and the Biblical text often refers to it as a plain, 'In the plain of the Jordan the king cast them, in the clay ground between Succoth and Zarethan' (1 Kings 7:46). The most southern and widest part carries two names. The Bible refers the western side as 'the Plain' or 'Valley of Jericho.' 'Then Moses went up from the plains of Moab to Mount Nebo, to the top of Pisgah, which is opposite Jericho. And the LORD showed him all the land ... the Plain, that is, the Valley of Jericho the city of palm trees' (Deuteronomy 34:1–3). The eastern side is referred to as 'The Plain of Moab.' 'They left the mountains of Abarim and camped on the plains of Moab by the Jordan across from Jericho. There on the plains of Moab they camped along the Jordan from Beth Jeshimoth to Abel Shittim (Numbers 33:48–49). This area is 'by the Jordan opposite Jericho' (Numbers 26:3), 'by the Jordan at Jericho' (Numbers 31:12) and 'beyond the Jordan east of Jericho' (Joshua 13:32). This desolate and sterile section of the valley (away from the small alluvial pans of the springs and wadis) is referred to in Biblical descriptions, 'Pisgah that looks down on the desert' and '... Balaam to the top of Peor, which overlooks the desert' (Numbers 21:20; 23:28).

Abel-shittim and Beth-jeshimoth: The Israelites under Moses, ‘camped by the Jordan from Beth-jeshimoth as far as Abel-shittim in the plains of Moab’ (Numbers 33:49). The context appears to use Beth-jeshimoth and Abel-shittim as extreme points of an arc encompassing the Plains of Moab across from Jericho.

Shittim and Abel-shittim may be interchangeable (Numbers 22:49; 25:1; Joshua 2:1; 3:1) but Simons argues that Shittim is the region that the Israelites camped in and Abel-shittim (with the definite article) refers to a specific area (the northern part) of the camp (Simons 1959:268). Abel-shittim can be translated as ‘meadow or pasture of acacias’ (ABD 1996, s.v. ‘Abel-shittim’) and would be appropriate for the alluvial pan around Wadis Kefrein and Hisbon of the Plains of Moab. Eusebius describes Shittim as simply being at the foot of Mount Pisgah (Onomasticon 154:10). Albright (1926:49) and Abel (1967:234) identified Tell Kefrein (93 Figure 2.41) as Shittim. However, more recent scholars (Simons 1959:268; Noth 1953:29, 142; Glueck 1968: 204; Aharoni 1979:429 and MacDonald 2000:89) prefer Tell Hammam (64 Figure 2.41) on Wadi Kefrein. Both sites have Late Bronze and Iron Age material. Both sites are good candidates for Abel-shittim. Tell Hammam appears a favorite simply because it is a larger more impressive fortified site in the area (with the possible exception of Tell Iktanu which has only Middle Bronze and Iron Age remains (MacDonald 2000:90).

Beth-jeshimoth is near the ‘Sea of the Arabah, the Salt Sea, southward to the foot of the slope of Pisgah’ (Joshua 12:3). Based on the preservation of parts of the name, there are four primary candidates for Beth-jeshimoth: Tell Azeimeh, Rujm, Wadi ‘Azeimeh and Khirbat Sweimeh. None of these sites are marked on Figure 2.41 as only Iron Age and later material has been surveyed. Glueck found Iron Age I-II pottery along a foundation of a wall of indeterminate age (1951:401-402). The Tell is located near a ridge that could have provided a route up to the Madaba Plateau. The majority of scholars including Glueck (1943:24-25), Noth (1953:121), Aharoni (1979:34, 432) and MacDonald (2000:88-89), advance Tell Azeimeh as the best candidate for Beth-jeshimoth.

Jericho is universally identified with Tell Sultan. Jericho is also known as ‘the city of Palms’ (Judges 3:13), a reference to the productivity of the rich alluvial soil and ample spring water. The Israelites camped across the Jordan from the city (Numbers 22:1; 26:3), before sending two spies into the city (Joshua 2) and then conquering Jericho (Joshua 5:13-6:23). The city was then given to the tribe of Benjamin (Joshua 16:1, 7; 18:12, 21). During the time of the Judges, Eglon of Moab occupied it before being ousted by Ehud (Judges 3:13). The first scientific surveys were recorded by Conder, Kitchener, Palmer and Besant in 1881 but more recent studies have been published by Bartlett (1982:1-26) and Bienkowski (1986:1).

There are references to at least three and up to five distinct locations by the name *Gilgal* in the Old Testament. The one in the Jordan Valley is the place where the Israelites camped after crossing the Jordan River (Joshua 4:19), celebrated their first Passover in the promised land (Joshua 5:10-11), used as a base during their conquest of the highlands (Joshua 1:6-7, 9, 15; 10:43), divided the land (Joshua 15-19), Ehud instigated his assassination of the Moabite king (Judges 3:19) and Samuel used as a base in his judicial circuit (I Samuel 7:16). The only physical description of the location of Gilgal is that it is ‘on the east border of Jericho’ (Joshua 4:19). The exact size and territory of Jericho is unknown. Tell Nital, 3.5 kilometers (2.2 miles) east of Jericho is a traditional site for Gilgal. Although it fits the general location, excavations have revealed nothing before the Byzantine period (Muilenberg 1955: 19–20). Two other candidates are sites immediately north and slightly west of Khirbet Mefjir (M.R. 193143), 3 kilometers (1.8 miles) north-east of Jericho. The western site has Iron Age pottery (Muilenberg 1955), while the northern site is inconclusive (Bennett 1972; Landes 1975). Today, the name Gilgal is preserved in the modern town name of Galgala/Galgul 17 kilometers (10.5 miles) north of Jericho.

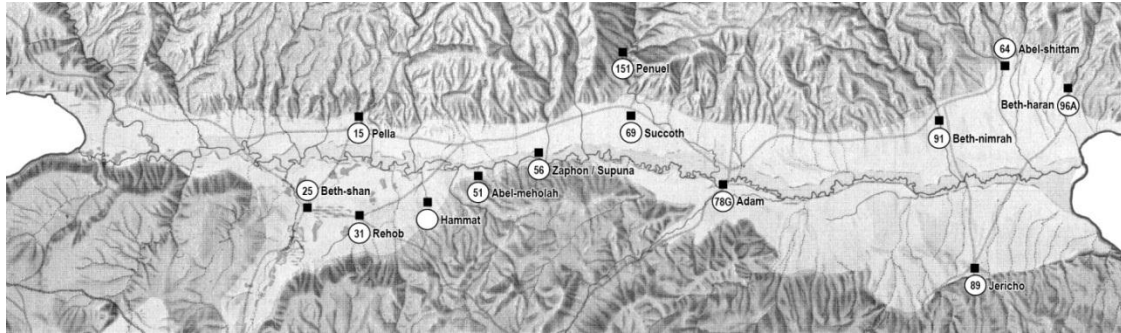


Figure 2.42: The most widely accepted historical references

The most widely accepted historical references with site numbers corresponding to Figure 2.37. Hammat is not numbered because Tell Hammeh surveys record only Iron Age and later and thus is not listed in Figure 2.37 (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

2.3.2 Transportation/road networks

2.3.2.1 Roads

The international ‘highway’ system between Egypt and the northern empires gave the southern Levant its historical prominence. Before Roman Times there is no archaeological evidence of roads in the southern Levant between cities. Within cities, evidence of cobblestones, finely-tamped pebbles and sherds or plastering can be found. But evidence of engineered roads does not emerge until the Roman period (ABD 1996, s.v. ‘Roads and Highways’).³¹

There is historical evidence for an established road network in the Late Bronze Age. The clearest is Papyrus Anastasi I, a satirical letter between two military scribes that has several sections pertaining to a route that a scribe, on his chariot, would take through Canaan (see 3.2.2.4). The context of the letter describes several roadways as basic knowledge that any professional Egyptian scribe/Maher would know and be able to traverse. Thus we can assume that the routes Hori describes were long-established Egyptian routes through Canaan:

Come, set me on the road southward to the region of Acco(?). Where is the road of Achshaph? Beside(?) what city (does it pass)? Pray teach me about the mountain of wsr; what is its peak like? Where is the mountain of Shechem? ... The Maher – where does he make the journey to Hazor? What is its stream like? Put me [on] the route to Hammat, Djeger and Degerel ...

³¹ Cf. G. Casseon and A. Rainey, Jerusalem University College lecture notes 1999.

teach me about his road ... acquaint me with Rehob; explain Beth-sha-el and Tereqel. The stream of Jordan, how is it crossed? ... Cause me to know the way of crossing over to Megiddo which is above it (Papyrus Anastasi I: lines 21:6-23:1).

Other Egyptian texts, such as the topographical city list of Thutmose III, listed 119 defeated towns from military campaigns (see 3.2.1.4). As the lists are often in similar order from one Pharaoh's campaign to another and follow clear paths from one city to another along viable topographical routes, it is safe to assume that clear paths of transportation were established in the Late Bronze Age, demonstrating a 'road' network throughout the Levant. Still other Egyptian texts mention caravans traveling between cities and the need to keep the trade routes open (EA 255). Also, from the Amarna period, the King of Bashan states that he has kept and protected the roads and caravans in his territory:

To the king, my lord, my Sun: Message of ..., your servant]. I [f]all at the feet of [my lord]. The king, my Sun, is a fath[er] to me, and [...] I heard the con[sent] of the king, my lord. [I made very] careful preparat[ions], and I escorted all the king's caravans as far as Buṣrun[a]. I heeded [you]. As I am your servant [...] (EA 199 translated by Moran [1992]).

The narrative of Joseph in the book of Genesis refers to caravans passing through Gilead. 'As they sat down to eat their meal, they looked up and saw a caravan of Ishmaelites coming from Gilead. Their camels were loaded with spices, balm and myrrh, and they were on their way to take them down to Egypt' (Genesis 37:25).

The southwestern-most sector of the coastal highway along the Gaza coast is referred to in Egyptian literature as 'the way of Horus' (e.g. Sinuhe, Merikare, Papyrus Anastasi I in ANET 1955:21, 416, 478, respectively). In the Bible, this segment of the road was known as the 'way to the land of the Philistines' (Exodus 13:17).

The Biblical book of Numbers records Moses asking the Edomites for permission to pass through their country on a route that became known as part of the 'King's Highway':

Please let us pass through your land. We will not pass through field or vineyard, nor drink water from a well. We will go along the King's Highway.

We will not turn aside to the right hand or to the left until we have passed through your territory (Numbers 20:17).

From the period of the Judges, the author describes parts of the main north-south ridge (trunk) route of the western highlands, 'Behold, there is the yearly feast of the LORD at Shiloh, which is north of Bethel, on the east of the highway that goes up from Bethel to Shechem, and south of Lebonah (Judges 21:19). And that, 'In the days of Shamgar, son of Anath, in the days of Jael, the highways were abandoned, and travelers kept to the byways' (Judges 5:6).

During the Divided Monarchy, the prophets used imagery of road maintenance in their poetical message,

[b]ut my people have forgotten me; they make offerings to false gods; they made them stumble in their ways, in the ancient roads, and to walk into side roads, not the highway (Jeremiah 18:15).

In the wilderness prepare the way of the LORD; make straight in the desert a highway for our God (Isaiah 40:3).

Build up, build up, prepare the way, remove every obstruction from my people's way (Isaiah 57:14).

Paved roads existed in Egypt, Mycenae and Greece in the Late Bronze Age and earlier (Dorsey 1991:25-26). Paving technology was known in the southern Levant from the Early Bronze Age. Examples of pavements within cities have been found at Beth-Yerah (Early Bronze Age), cobbled streets at Shechem (Middle Bronze IIB) and at Joppa (Late Bronze Age) (Dorsey 1991:26; NEAEHL II:535; NEAEHL IV:1087). Franken excavated an Iron Age street at Tell Deir Alla that was 'paved and the paving was regularly renewed. Thick layer of reed was laid down over the whole area.' The paving was made with a mixture of reeds and clay and then covered with a layer of clay (Franken 1969:28). But routes outside of the city do not appear to have been paved until the Roman era. With the lack of excavation and paving, there is no real archaeological evidence of roads prior to the Roman era in the Levant.

Despite lack of archaeological evidence, there is ample historical evidence for Late Bronze Age travel for weddings, funerals, cultic functions, festivals, couriers bearing messages, government officials, caravans of traders and military personnel and

armies (cf. Dorsey 1991:1-6). These travelers would require a road system in the southern Levant that would include the Jordan Valley.

Without any physical traces of roads from the Late Bronze Age or any of the following periods until the Roman era, there are four methods to explain the ancient road system:

1. Archaeology: A transportation system for communication and trade is required for the growth of individual settlements. The evidence of these settlements is much easier to find and exist long after evidence of the roads has been erased. Sites of cities, towns, forts and stations provided protection and provisions to travelers. Examining the location and distribution of archaeological sites infers a connecting road system within topographical considerations.
2. Topography: The economy of time, effort, expense and safety requires roads to follow the line of least resistance. This means avoiding steep mountains and valleys. If they are unavoidable, passes can be used. If no passes exist, saddles (lowest point between two hills), depressions, gradual slopes or ridges for ascending and descending can be used. Roads must stay close to a source of water but avoid marshes or sand.
3. Historical sources: A number of roads and routes are mentioned or presupposed in the Egyptian, Biblical and Assyrian literature. Some examples from Papyrus Anastasi I, the Amarna letters, Exodus, Numbers and Judges are mentioned above.
4. The courses followed by later known roads: In the southern Levant there are physical remains and historical descriptions and maps of roads from the Roman to the modern era. This resource is based on the assumption that routes and road systems remain fairly static due to topographical conditions and the expense of excavations. Roman mile markers can still be found along some modern roads of Israel and Jordan today. In some cases, as in Jordan's Highway 35 that connects Madaba to Kerak, the modern highway not only passes a number of Roman mile stones but when it was first paved in the 1940s, tar was poured directly over roman road foundations in sections

descending from Kerak and the Wadi Mujib.³² This Roman/modern route passes a number of archaeological sites related to points along the 'King's Highway' that are dated or mentioned in texts from the Late Bronze Age (cf. Aharoni 1979:43-46; Dorsey 1991:52-54).³³

The following section will use the above methods to infer a basic road system of the Jordan Valley and its entrances/exits of the Late Bronze Age. For the western side, this research relies heavily on Dorsey's 1981 Ph.D. thesis on 'The roads and highways of Israel during the Iron Age,' modifying the routes according to the Late Bronze Age sites in the various databases. The road systems on the eastern side are this author's own inferences. These inferences are made by examining the settlement patterns mapped out in section 2.3.1.1, the topographical routes and later Roman and modern routes revealed in Google Earth, Monson 1998, Monson & Lancaster 2008.

The roads will be referred to by three general terms: international highways, regional roads and local roads.

There are only two international highways, the coastal highway and the King's Highway. The coastal highway is often called the *Via Maris* or *Way of the Sea* due to the Latin Vulgate translation of Isaiah 9:1.³⁴ The road rarely runs right next to the Mediterranean Sea but stays on the wide coastal plain of the southern Levant. There were different names for various sections of this route. The Israelites referred to the section from the Nile Delta, through the Sinai and onto the coastal plain as the 'way to the land of Philistines' (Exodus 13:17). The Egyptians of the 19th Dynasty referred to it as 'the ways of Horus' (Papyrus Anastasi I). This is the primary international highway running from the Nile Delta along the Mediterranean coast to the Jezreel

³² Personal conversations with Jamiel Zerakat (Abu Bisher) 1995-2004. Discussion on his work crew pouring tar over Roman road foundations around Kerak, November 1999. Abu Bisher was a retired road engineer/architect who worked on what would later become Highway 35 for the Hashimite Kingdom of Jordan.

³³ Cf. G. Casseon and A. Rainey, Jerusalem University College lecture notes 1999.

³⁴ The road specifically referred to as *the way of the sea* runs from Banias due west to Tyre (Rainey 1981:146-151).

Valley. As it continues north, it divides with one branch remaining on the coast towards Acco, Tyre and Sidon. Two branches cut through the Galilee heading towards Hazor and Dan before continuing north to the Beqaa or northeast to Damascus. Another branch, the key to this study, exits the Jezreel Valley southeast through the Harod Valley into the Jordan Valley towards Beth-shan. The King's Highway runs south to north from modern Elat/Aqaba to Amman, Irbid, Ashtorath and Damascus. The preferred route probably migrated east-west along two routes much as in Roman times when various road construction projects pushed eastward to avoid the deep wadis of the Zered, Arnon, Jabbok and Yarmuk. One route stays in the mountains, connecting the major sites Bozrah, Kir Moab (Kerak), Dibon, Aroer and Heshbon. The modern Highway 35 follows a probable route; the other option borders on the eastern desert. It avoids the deep wadis but has less water and has to deal with large commercial settlements. The modern desert Highway 15 and the Ottoman train track from Amman to Aqaba follow probable or similar routes. Both branches rejoin at Rabbah Ammon before heading north to Damascus via Ramoth Gilead, Ashtaroth and Karnaim. Biblical names for various sections of this road are: The 'King's Highway' (Numbers 20:17; 21:22), simply 'the highway' (Numbers 20:19), the 'Way of Wilderness of Edom' (2 Kings 3:8) and the 'Way of the Wilderness of Moab' (Deuteronomy 2:8). In the north, it was called 'the Road to Bashan' (Numbers 21:33; Deuteronomy 3:1) as it connected Heshbon, the capital of King Sihon, to Ashtaroth, the capital of King Og in Bashan (Aharoni 1979:55). Both these international highways are outside the immediate study of this thesis. However, it is the Jordan Valley's east-west regional routes connecting these two international roads that adds to its strategic nature for both local and imperial powers.

The regional roads all run primarily west-east, taking advantage of the topography to connect settlements of the region as they provide access to both international highways. There appears to be five regional routes on the west side and six on the east side of the Jordan Valley. On the west, the easiest for travel is the route from the Jezreel through the Harod to Beth-shan. The others follow wadis and ridges:

- across the Jerusalem saddle from Gezer, Central Benjamin Plateau, Micmash down to Jericho;
- from Shechem through the Wadi Farah or northwest from Shechem to Tirzah and down to Rehob;
- from the Galilee down the Nahal Jabneel.

From the east:

- the Wadi Raqqad;
- Wadi 'Arab;
- Wadi Ziqlab;
- the ridges around Wadi Yabis;
- Wadi Jabbok;
- Wadi Kufrien; and
- the Slopes of Pisgah.

The regional roads probably carried the bulk of both regional and local travel. There are a number of smaller, local routes that give access to and from the Jordan Valley to smaller, more isolated settlements in the eastern or western highlands. These routes are smaller and more difficult to travel, due to topography or lack of water, providing access to the highlands at less strategic points of interest.

2.3.2.2 Routes

When examining the map of the Jordan Valley and the escarpment with identified Late Bronze Age sites marked and applying the four methods listed above towards inferring the road system of the region in the Late Bronze Age, an expected pattern emerges:

- 1) and 2) The archaeological sites form a pattern matching the topography of wadis and ridges that provide access into and out of the valley;

3) A number of these routes parallel historical accounts (see next section and Chapter 3).

4) Thanks to Dorsey's research on the west side of the valley (1981; 1991), each western route has the precedent of being followed by later Roman and/or Ottoman roads. Further study on the east side remains to be done in correlating the Roman/Ottoman road system with the MEGA-J listings for Late Bronze and Iron Age sites.

The evidence points to at least 23 Late Bronze Age routes (labeled A-W on Figure 2.43) connecting the Jordan Valley to the western and eastern highlands. There are several other topographical routes used in later periods (Dorsey 1981; 1991) that are not supported by Late Bronze Age archaeological sites. Three of the seven southern routes (Q, R and W) are supported by historical references, topography and later period roads but no Late Bronze Age archaeological sites.



Figure 2.43: Probable road routes inferred by archaeological sites, topography and later more established routes (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

2.3.2.2.1 Valley floor routes

North-south travel along the Ghor is relatively flat and free of obstacles beyond the perennial and seasonal water floor of the various wadis. On the east side, it would

have been easy for a road, or several roads, to run the whole length of the valley. There were probably various roads, running parallel to one another, with at least one following the edge of the escarpment and another connecting the line of sites on the Ghor/Qattara boundary. Routes between these two east-west extremes would have been used according to the easiest and most direct path between the desired points. The western side would have a parallel route in the north and south sections but there is little room or evidence for a main transport route on the west side of the central 'waist' section. In the southern section, the archaeological sites and topography (the open saline plain descending into a sterile Qattara and wild Zor vs. the rich alluvial pans, fresh springs, rivers and cooler air flowing down from the highlands) probably kept the main routes close to the escarpments.

2.3.2.2.2 Routes into/out of the northern section

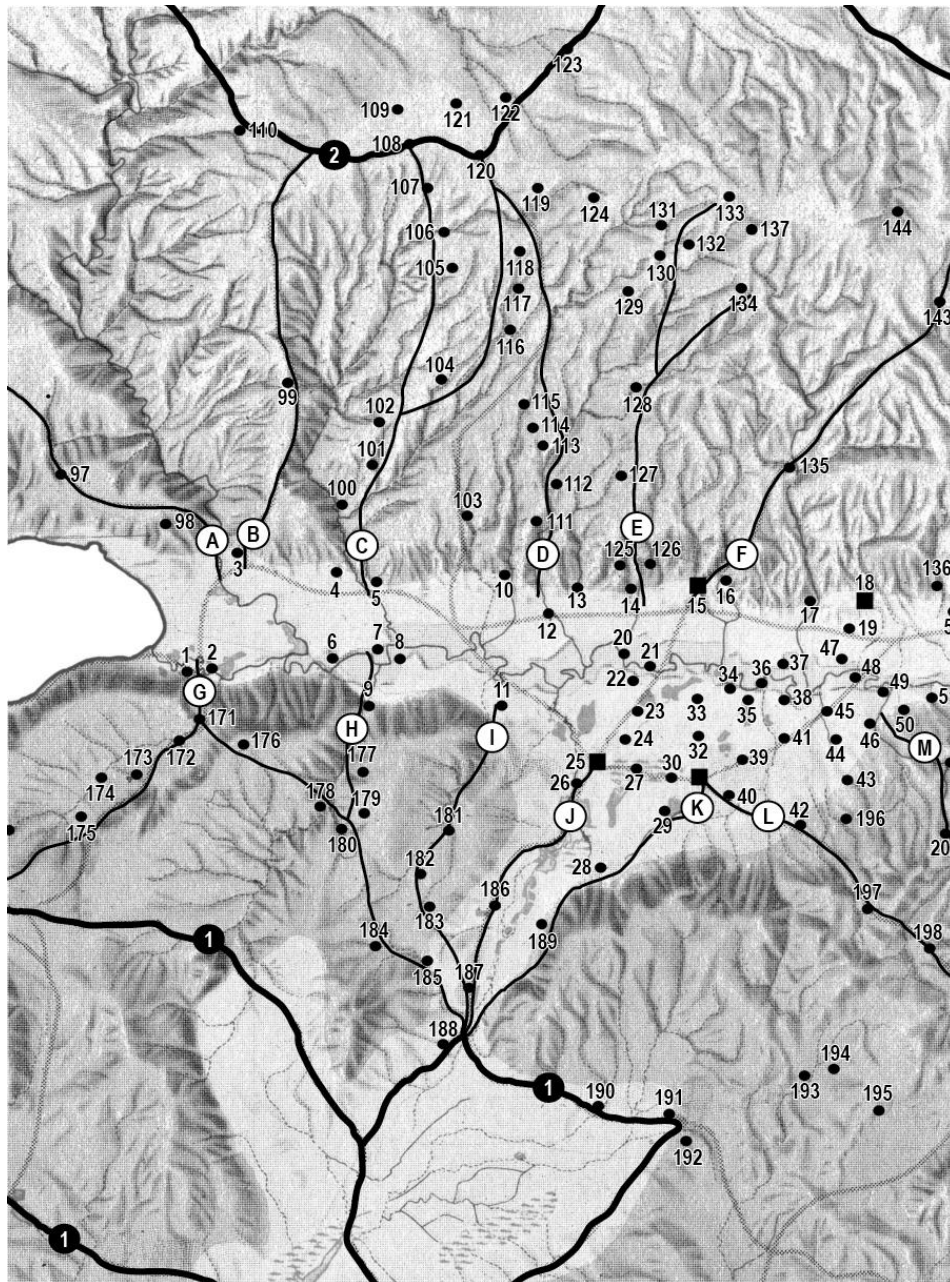


Figure 2.44: Probable routes of the Northern Jordan Valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

Numbers in parentheses refer to site markings on Figure 2.37.

Route A ascended the north ridge of the Yarmuk Valley at ain al Tapaqa (3) to Khan al'Aqaba (98) before veering north northeast to Tell Sarj (97) and then up towards Damascus via the Golan.

Route B ascended the south ridge of the Yarmuk from ain al Tapqaq (3), veering southeast to the north ridge of wadi 'Arab by Wadi Arab Survey Site 046 (99) before joining the international highway between Gweibeh (110) and Samoqa (108). This route appears to have been a key route to the Bashan and Damascus, not as direct as route A but with the advantage of passing by a number of key cities of the Bashan such as Yanoam and Kiriath-anab (see Figure 3.11 & 13).

The beginning of *Route C*, at the mouth of the Wadi 'Arab, was guarded by two sites, Shunah Shemali (4) and Tell Sakhineh (5). The ridge provided a smooth ascent by the sites of Zer'ah (100), Bond (101) and Qaq (102). The ridge then veered southeast to Umm Ghozian (104). This road may have branched, providing two options to the central tell at Irbid (120). One route (which followed close to the modern highway) went east connecting Jamuta (105), Jijeen (106), Som (107) and Samoqa (108) where it entered the plateau just north of Irbid. The second potential branch followed the ridge southeast to Wadi Ziqlab Survey Site 030 (116) where it joined route D ascending due east, connecting Sibya (117), Wadi Ziqlab Survey Site 018 (118), Kufr Yuba (119) and then on to Irbid (120) on the main north-south international highway.

Route D ascended up the north ridge of the Wadi Ziqlab. At the base of the ridge are two sites, Arbain (12) and Iraq al Rashdan (13). As the wadi ascends there is a string of small sites: Wadi Ziqlab Survey site 37, 34, 33, 30 and Rukheim (111, 112, 113, 114, 115). The ridge route continued ascending east to Irbid (120) passing by the sites of Wadi Ziqlab Survey Site 030 (116), Sibya (117), Wadi Ziqlab Survey Site 018 (118), Kufr Yuba (119).

Route E is a small rough ascent up the Wadi Hammeh, probably just a local route with three sites on the valley floor and the foot of the escarpment, Wadi Hammeh Survey Site 03 (14), Site 08 (125) and Site 19 (126). The ridges of Wadi Hammeh connect several small isolated sites on the escarpment and the far western edge of the eastern plateau Deir Qequb (127), Deir Abu Sa'id (128), Wadi Ziqlab Survey Site 91 (129), Gbub south and north (130), Harqala (131), Beida (132), Ya'amun (133) and Birqish (134).

Route F started at Pella (15). After a steep but short incline immediately east of Pella, the ridge travels southeast to Khirbet Meryameen (135), over the Wadi Yabis to Muzabal (143) before joining up with the King's Highway above the Suf Valley north of Jerash.

Route G ascended from the west, from the valley up the Nahal Yavne'el. The entrance of the Nahal Yavne'el has the two sites of Beit Jinn (1) and Tell Ubeidiya (2). The route comes out of the Wadi onto the Kokhav Plateau near the site of Sheikh Muzeighit (171). The route then branched northwest and southwest. The northwest route connected Khirbet 'Ayun Hore'a (172), Tell Yin'am (173), grid site 1962 2371 (174) at the midpoint of the valley, coming out of the Yavne'el by Tell Adami (175) which dominated the narrow Damiyeh pass as it continued deep into Lower Galilee, connecting with a branch of the Coastal Highway heading north and the strategic Golani junction before the Horns of Hittim. The southwest branch continued to Hadath (176), site at 1968 270 (178) and Tell Rekhesh (180) across the Yisakhar Plateau of Lower Galilee before joining a junction of several routes near Mount Moreh. This southwest branch had several ascents/descents that would have made it difficult for travel. The northwest branch was an easier route and may have been preferred for traffic exiting the valley going to the Lebanese coast or the Beqa'a as it joined branches of the international highway and would have been a viable option to going through the Harod Valley.

Route H ascended the Nahal Tavor. In an arc before the Nahal, near the banks of the Jordan River, guarding any fords in front of the Nahal are the three sites of Khirbet Dalhamiya (6), Dhahhak (7) and Kittan (8). At the mouth of the Nahal is site at 2022 2259 (9). The route then continued up the Nahal connecting Bira (177), Khirbet Mughaiyir (179) and Tell Mukharkhash (180) before heading southwest across the Yisakhar Plateau towards the road junctions around Mt. Tabor. This is one of two possible routes (routes H and I) of Sisera's flight in Judges 4-5 (see 3.3.5.3). This could have been a key rugged local route between those living on the Yisakhar Plateau and the Jordan Valley. Tell Mukharkhash (180) is a large Late Bronze Age site and a candidate for Anaharath (Aharoni 1979:168, 188).

Route I includes Tell Yissakhar (11), Na'ura (181), 'En Ha-Yadid (182), site at 1992 2218 (183), and then joins the road junctions at Mount Tabor around Khirbet Safsafa (185). This is one of two possible routes (routes H and I) of Sisera's flight in Judges 4-5 (see 3.3.5.3). With the proximity of the Harod Valley to the south and two northern routes (G and I), this route was probably limited to local traffic.

Routes J and K both ran through the Harod Valley and were branches of the Coastal Highway. Before modern irrigation and drainage practices, the Harod River created swamp and marsh down the center of the Harod Valley (Karmon 1971:192). This forced traffic to either side of the Harod Valley. Route J ran on the north side of the Harod River and Route K on the south side. Route J followed a course from Beth-shan (25) to Tell Zehara (26), Tell Shelavvim (186), and to En Ha-Yadid (182). Route K ran from Tell Sarim/Rehob (31), Khirbet Fawana (29), Sokha (28) and Tell Sheikh Hasan (189). Both entered the Jezreel Valley around Shunem (188). Route J through the Harod Valley to Beth-shan was probably the most active and strategic, connecting Beth-shan to the Jezreel Valley as well as offering the Coastal Highway more direct routes northeast up to the Bashan and Damascus. Route K offered the same connections to the Jezreel but was more direct for traffic heading to/from the southeast, stopping at Tell Sarim/Rehob (31) and bypassing Beth-shan.

Routes L and M offered access from the Beth-shan Valley into the Samarian highlands and the regional central north-south ridge route that ran the length of the western highlands. Route L was the most direct from the major cities of Beth-shan and Rehob as well as the easiest ascent southwest of Rehob. Tell Qa'un (42) is at the base of the ridge route. The route has a clean ascent to Qitneh (192), Munthar A (198), and Tell Far'ah (199) before reaching the top of the escarpment where a regional transport junction allowed access to the central north-south ridge route of the western highlands towards Shechem and all points south, northwest towards the coastal highway and southeast down the Wadi Farah back to the Southern Jordan Valley. Route M offered a similar destination but cut deeper south into the Samarian hills and was a more difficult route crossing several wadis as opposed to following a central ridge. Route M (Figure 2.44-45) began at Tell Shalem (46) ascending southwest and connecting several small sites, Tell Hulu (201), Khirbet Mhallal (202),

Khirbet Hamamat (203), Khirbet Yusef (204) and el-Bird (205) before meeting the northern end of main north-south ridge route at Tell Far'ah (199).

2.3.2.2.3 Routes into/out of the central section

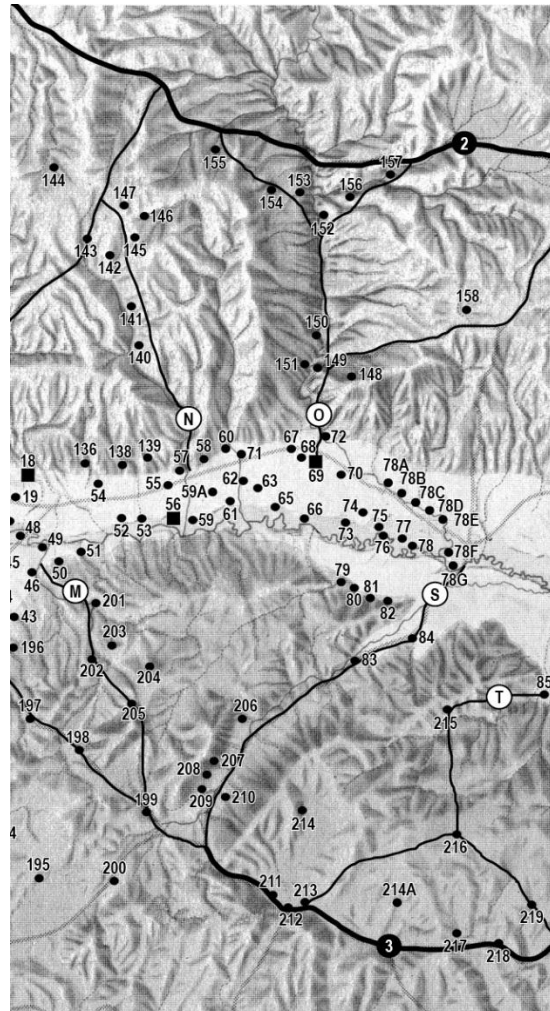


Figure 2.45: Probable routes of the Central Jordan Valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

Route N follows the Wadi Kufrinja up towards Muzabal where it joins Route F. This route was restricted to local traffic of the central 'waist' of the valley as Route F from Pella and Route N on the Wadi Zerqa are easier, more centrally located and connected larger sites. The mouth of the Wadi Kufrinja opens up into the Zerqa Triangle with three sites: Kerieme Gharbe (55), Keraymeh North (57) and Khafseh (58). Four kilometers up into the escarpment, the Wadi Kufrinja broadens up and branches out into several gentle wadis south of the Ajlun Mountains. Three sites,

Mansura (140), Safit (141) and Muzabal (143) lay in a direct line up the main wadi. Hamid (145), Suf (146) and Dahr Medinal (147) are situated in southeast side wadis.



Figure 2.46: From Ajlun looking down the Wadi Kufrinji along possible route N
The Hills of Samaria are visible on the horizon (Photo: The American Colony and Eric Matson Collection 1932: 02778 www.lifeintheholyland.com).

Route O followed the Wadi Zerqa up to the eastern highlands with two main branches. From the rich Zerqa Triangle and the key site of Deir 'Alla (69), the valley began a gradual four kilometer ascent to the sites of Dhahb Gharbi and Sharqiyeh (149 and 151) (candidates for Penuel). Four kilometers further, the east ridge of Wadi Dananir provided a steep smooth and uninterrupted ridge route south into Upper Gilead into the area of Zia. The ridge route passed the sites of Umm Idham (148) and Khabyeh (158) and descended southwest towards Salt (160) and the Wadi Shu'eib (Route P) before reaching the King's Highway junction around the sites of Umm Dananir (161), Hawayah (162), Qasir (163), and Henu (164) on the way to Amman. The Wadi Zerqa continued due east from the Wadi Dananir branch, narrowing but still offering a gradual ascent for another eight kilometers where a

string of three sites suggests a possible route up a southern ridge towards the King's Highway, Rehil (152), Mayita (156) and Shubeil (157). Two other sites, Amame (153) and Kweim (154), form a line in the direction of Jerash (155) suggesting a branch towards the north. In April 2000, Van der Steen and a party of four took a pack mule loaded with 20 kilograms of luggage and 20 liters of water. They hiked the main branch of this route to the Amman plain via Wadi Dananir. It took them four days to reach Khirbet Um Dananir (they did explore several side wadis and routes along the way which added an undetermined amount of time to the journey). Van der Steen's conclusion was that this was a viable topographical route supported by Late Bronze Age material at the sites of Hemmeh (no. 71), Dhahab Garbia (no. 149), Rehil (no. 152), Mayita (no. 156) and Shubeil (no. 157) along the way (Van der Steen 2000:191-199).

2.3.2.2.4 Routes into/out of the southern section

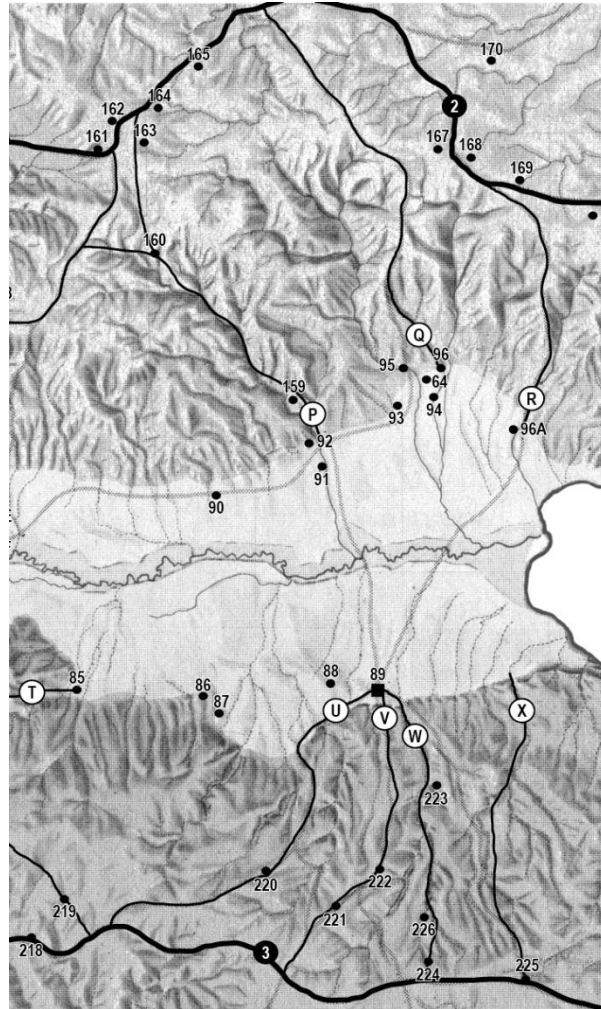


Figure 2.47: Probable routes of the Southern Jordan Valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

Route P followed the Wadi Shu'eib from the Plains of Moab up towards modern Salt and Fuheis. The sites of Tell Nimrin (91) and Tell Mustah (92) are near the entrance to the Wadi. Only one Late Bronze Age site has been discovered along this route, Magfiat N. 98 (159) but the wadi is well defined with no ridges for 12 kilometers. The wadi then splits, offering access to Upper Gilead and Salt (160) towards the north or east towards Qasir (163) and Amman. This route was probably used more for local traffic, but could have served regional travelers from Jerusalem and Jericho wishing to gain immediate access to the King's Highway and points north while bypassing the Zerqa Triangle.

Routes Q and R follow the ridges along the Wadis Kafrien and Hisban. Although no Late Bronze Age sites are known along these ridges, they provide a relatively easy topographical route with a few Iron Age sights along the way to the rich Madaba Plateau, the King's Highway and routes to Ammon. The Biblical narratives of Numbers, Deuteronomy, Joshua and Ruth provide historical references to the existence of routes on the Slopes of Pisgah (see 3.3.3-6). At least five sites, Kufrein (93), Tahun (95), Jazyir (94), Matabi (96) and the large Tell of Hammam (64) are at the base of these two potential routes. The sites of Hesban Regional Survey 128 and 132 (167 and 168) and Umm Sareb (169) are positioned along the top of the escarpment where these ridges arrive.

Route S: One of the key regional routes between the Samaria Hills/western highlands must have been through the Wadi Farah. This broad valley is easy to traverse and connects the central north-south ridge route near Shechem to the central and southern sections of the Jordan Valley and the key fords near the Damiyeh bridge crossings. Tell Shimadi (84) and Khirbet Shuweihā (83) are at the mouth of the Wadi Farah. As the route ascended to the west, it connected the sites of Hamamat (206), Maqbara A (207), Maqbara B (208) and Wadi el-'Aris (206) on the northern ridges and Tell Miske (210) on the southern ridge. It then joined the north-south central ridge route between Tell Far'ah (possible Tirzeh) (199) towards the north and Tell Balata/Shechem (212) to the south. A ridge route that descended to the coastal highway is due northwest (*Route S* is visible on Figure 2.45 of the Central section).

Route T provided the most direct route between Shechem and the Southern Jordan Valley (Jericho and the fords east). *Route T* began its ascent at Tell Sheikh Dhiab (85) up the Wadi Fasil. When the Wadi Fasil ends, it followed a natural ridge to Jebel el Mahharah 2 (215) and then westward to Khirbet El 'Urme (216). It then branched northwest towards Shechem or southwest towards Shiloh. Although more direct than Wadi Farah, this route was probably limited to local traffic due to the sharper inclines.

Route U started near Jericho (89) and followed the ridge between Wadi Auja and Wadi Makuk to Khirbet Rahaya (220). It continued northwest to reach the north-

south ridge route of the western highlands near Shiloh (219). A ridge route branched southwest near the top of the escarpment by Khirbet Marjame (221) and joined route V on the way to the Central Benjamin Plateau.

Route V and W represent two ridge routes that closely paralleled each other. The northern one (V) followed a ridge two kilometers (1.2 miles) northwest of Tell es Sultan at Na'aran. The southern route (W) began about 1.5 kilometers (1 mile) southwest of Tell Sultan and ascended on the eastern side of Wadi Shuq Dabi' and followed the course of the modern Tariq Abu Hindi road towards Micmash. Near Marjameh (223), the routes began to separate. The northern route (V) went more northerly to the sites of Ein Samiya (222) and Khirbet Marjame (221) on the way to Bethel. The southern route (W) continued due west to the sites of Khirbet Maqatir (candidate for Ai, see Wood 2009), Beitin (224) and on to the Central Benjamin Plateau. Both of these routes have been surveyed by Mazar, Amit and Ilan in 1984. They suggest that the northern route (V) is the 'Wilderness Road' of Joshua 8:15 and Judges 20:42. Their survey suggests that the southern route (W) of the Wadi Shuq Dabi' is the 'Border Road', marking the northern boundary of Benjamin from Joshua 18:12-13 (Mazar, Amit & Ilan 1984:236-237).

Route X represents route(s) descending from Jerusalem and Bethlehem to the Jordan Valley. No Late Bronze or Iron Age sites have been listed in this area. But routes descending from Jerusalem through Mishor Adumim and the Wilderness from Bethlehem have been used from Roman times and the narratives of Ruth, 2 Samuel 10:1-5, 15-17, 19:15-34, 2 Kings 25:4 and Jeremiah 39:4 and 52:7 infer that a route, referred to as the 'Arabah Road' existed in the transition period of the Late Bronze Age and into the Iron Age. A route from the Central Benjamin Plateau and Jerusalem also descended west through the Shephelah to Gezer. Gezer was a main Egyptian base, guarding not only this route into the western highlands but the whole southern part of the coastal highway. This route through the Shephelah to the top of Route W provided a secondary access route from the coastal plain into the Jordan Valley. This secondary route into the southern Jordan Valley could have been a contributing factor for the Egyptian penetration into the central highlands to defeat Israel as listed on the Merneptah stele (Finkelstein & Na'aman 1994:289).

In addition to the routes described here, there were also other options. With the explosion of Iron Age sites in the western highlands, came a proportional increase in inferred routes between the western highlands and the Jordan Valley. Dorsey maps out at least thirteen more Iron Age roads that connected central Samaria with the Jordan Valley (Dorsey 1991:171). The topography to support these routes was certainly present in the Late Bronze Age but only those routes (with exception of Q, R and W) that have Late Bronze Age sites have been covered in this chapter. Certainly there were more Late Bronze Age routes that existed but the archaeological and historical records are far from complete.

The number of Late Bronze Age sites along historical and topographical routes clearly demonstrates that the Jordan Valley was networked to both the eastern and the western highlands. As more sites are excavated, more Late Bronze Age occupation layers will surely be identified, strengthening the probability of these routes and showing that some of the many Iron Age sites on other routes out of the Jordan Valley (Dorsey 1981, 1991) were indeed in use during the Late Bronze Age.

Throughout the Late Bronze Age, there was probably an ebb and flow to the amount of traffic on the road. The archaeological record shows that a variety of Mycenaean and Cypriot pottery was found in the Jordan Valley and the eastern highlands (see 4.1.3.2). The historical literature suggests periods of decreased traffic when even the local population stayed off the roads, 'In the days of Shamgar the son of Anath, In the days of Jael, the highways were deserted, and travelers went by roundabout ways' (Judges 5:6). This specific reference to road closures could be to the region of Beth-shan or the Lower Galilee.

The road system would have included international, local, official and personal traffic. The Egyptian texts of the 18th and 19th Dynasties and the Bible refer to marching armies (EA 201), couriers and scribes (EA 256), trade caravans (EA 255:8-21), representatives of Pharaoh (EA 207) and the migration of large groups, 'We have completed the transfer of the Shasu tribes of 'Aduma past the fortress 'Merneptah-hotepher-Ma'at ... in order to keep them alive and in order to keep their cattle alive' (Papyrus Anastasi VI, ANET 1955:259). The Biblical narratives also record the

movements of large groups and smaller groups of families or individuals; the Danite migration (Judges 18), Naomi's family moving between Judah and Moab (Ruth), for courting a woman (Judges 14:5-7), going to weddings (Judges 14:8-10) and searching for employment (Judges 17:7-12).

2.3.2.3 Travel time and modes of transportation

Examples of modes of travel would certainly have included foot, donkey, camel, horse, chariots and two and four wheeled carts. A few Egyptian and Biblical texts that list modes of travel are:

They all went on donkeys so I could take their horses, after I had also made the townspeople captive for Egypt (Pharaoh Thutmose III, after defeating the Canaanites at Megiddo) (De Buck 1948:56-63, Gebel Barkal stele, lines 24-25).

And Gideon arose and killed Zebah and Zalmunna, and he took the crescent ornaments that were on the necks of their camels (Judges 8:21).

I am here with, along with my troops and my chariots, at the disposition of the archers wherever the king, my lord, orders [me to go] (EA 201 translated by Moran [1992]).

The sons of Israel did so: and Joseph gave them wagons, according to the command of Pharaoh (Genesis 45:21).

Ramesses III's battle relief with the Sea Peoples found at Medinet Habu shows carts drawn by oxen. Papyrus Anastasi I and IV describe not only a chariot journey through Canaan but chariot repair shops along the way at Gezer, Pella and Rehob.

The time it takes to travel across the Jordan Valley would depend on what mode of travel one is taking; walking, riding a horse, taking a pack animal or ox drawn cart. Walking speed on a flat surface usually averages 5 kilometers (3 miles) an hour. In general, traveling speeds throughout the region would allow for a daily distance of 32 kilometers (20 miles) on foot and, 40-48 kilometers (25-30 miles) by horse or chariot. An army of the ancient world could march 25 kilometers (15 miles) a day (Healy 1991:23). Thutmose III went from Sinai to Gaza 240 kilometers (150 miles) in 10 days (Aharoni 1979:153). Josephus reports that the walk from southern Galilee to Jericho 104 kilometers (65 miles) took 3 days. Robinson's small party of a dozen individuals took 30 minutes to ford the Jordan near Beth-shan (Robinson 1867:

III:316). Lynch's ground party on horseback ascended the eastern escarpment (probably approximate to route C, Figure 2.44) from their campsite on the east bank of the Jordan River via the Wadi 'Arab to the ruins of Um Quies in 3 and a half hours (Lynch 1849:196-197). Van der Steen's four day exploratory hike with pack mules up the Wadi Zerqa was mentioned earlier. From Ajlun to Pella, the 36 kilometers hike (approximate to route F, Figure 2.44) could be done in one day but most hikers today like to take two days. Ajlun to the mouth of the Wadi Yabis is a more comfortable day trip (Teller 2009:173-141). Hiking from the outskirts of Amman from Wadi Sir or Fuhies to the Plains of Moab via the Wadis Shu'eib or Kafrein (approximate to route P and Q, 2.3.2.1.a.ii) can be accomplished in 6-8 hours. On the western escarpment, it is a 6-8 hour hike to cover the 22 kilometers (14 miles) from the Mount of Olives to Jericho via the Wadi Qelt (included as a possible route in V and W, Figure 2.47). Kafr Malik/Ein Samye on Highway 458 to Jericho via the Wadi Awja (approximate to route U, Figure 2.47) takes six hours (from Kafer Malek it is 8 kilometers (5 miles) to Shiloh, 25 kilometers (16 miles) to Nablus/Shechem).³⁵ By foot and unencumbered by more than a day backpack, the valley floor is only a day's journey from the western and eastern highlands. Ascending the escarpments from the valley floor would add more time and effort. If pack animals or a heavy load was added, the journey from the valley to the highlands would take additional time. But if one stayed on known established paths, most routes from the valley floor to north-south routes in the highlands should not have taken more than two days or three at a maximum with laden pack animals.

2.3.2.4 River crossings

Travel through the Jordan Valley would necessitate the crossing of either the Jordan River or any of the various side waters with their perennial or seasonal flow. Bridge technology was known throughout Mesopotamia. Shalmaneser III's battle reliefs show the Assyrian army and chariots crossing a river on a pontoon bridge. An inscription from Seti I refers to a bridge across an Egyptian canal. The Akkadian

³⁵ Author's personal experience with Boy Scouts of America troop 806 of Amman, Jordan and personal field trips, 1994-2003.

literature also refers to the buying and selling of bridges and income generated from their tolls (cf. Dorsey 1991: 34-36).

Bridge technology and ferries would undoubtedly have been available in the southern Levant. All the Egyptian and Biblical literary references to crossing the Jordan River are by fords (see Fords and Crossings of the Jordan River in 2.2.2.6.1). Robinson's descriptions of fording the rivers and streams of the Jordan Valley are very similar to those quoted in section 2.2.2.6.1. 19th century AD fording conditions must have been similar to those of the Late Bronze Age. Other than the depth of the water, which varied by the season, other obstacles that hampered a crossing were a muddy or rocky stream bed or a swift current (Robinson 1867: III: 115, 316, 325, 374). Without these conditions, fording was relatively easy. Several examples to supplement Lynch's testimony of crossing the Jordan are given by Robinson. On May 15, 1838, Robinson and his party crossed the Jordan River and streams near Beth-shan on several occasions:

At 5.50 we reached the bank of the river at the ford; which proved to be over a long narrow island. The western and smaller channel was crossed without difficulty; though the stream was very swift. The eastern channel was twice as broad and deeper, with a swift stream; the ford being on a bar, over which the water breaks into a rift or rapid. Here there was some need of preparation: our saddlebags were taken before us; shoes and stockings were stripped off and pantaloons rolled above the knees. We thus got over very well. The water came up high on our horses' sides. At 6.20 everything was in order, and we were off; our Sheikhs telling us, that at the ford near Beisan the water was still deeper (Robinson 1867 Vol. III: 316).

The fords not only changed with the level of water but in their very nature over time:

In April 1884, my companion ... had found the ford ... so miry as to be almost impassable. There was therefore some reason to fear, that we might find difficulty in crossing the same stream today. The men of the village said the ford on this route was tolerably good; but we took with us a guide on horseback, to lead us to the right spot ... The stream was not large; the water scarcely reaching the fetlocks of our horses. It was just limpid and flowing over a bed of fine gravel ... the guide said that in the rainy season, the stream could not be crossed at this spot. We had been told at Tell Shemma, that the horses would sink perhaps up to their bellies; and we now greatly rejoiced at our easy passage (Robinson 1867 Vol. III: 115-116).

Robinson concludes (quoting Burkhardt), 'The Jordan is fordable in many places during the summer; but the few spots where it may be crossed in the rainy season,

are known only to the Arabs' (Robinson 1867 Vol. I:539). Throughout history, local knowledge and guides would be required for safe and easy passages. Even during Lynch's expedition, his guide from Beth-shan did not know all the fords of the southern Ghor and they needed a new guide for the south.

2.3.3 Economics

2.3.3.1 Industry

- The rocks, soils, wood and animals of the Jordan Valley and the surrounding regions provided a variety of resources to support industry. Flax, which was grown in the valley around Jericho (Joshua 2:6) is used to make textiles and oil.
- Chariot parts and other wood work: Papyrus Anastasi IV suggests that the forest around Pella provided wood for chariot parts. Papyrus Anastasi IV located in Torino and dated to the 20th Dynasty describes both Pella and Rehob in regards to the making of chariots,

Fine chariots of *brry*-wood more resplendent than lapis lazuli, their '*mdy*' being wrought in gold, their *htr*-piece of gold and their *thr* having the hue of red cloth and being carved with blossoms; the board wrought in *dsr*-wood, their *tst*-piece of ivory, their *im* of *sht*, their reins in one set, their spokes of Pher, their poles of lupa. They are washed, trimmed [...], leather-fitted, finished off, oiled and polished; their *mht* being set with six-fold alloy, their *gs-dbw* of gold, and their *swr* with the workings of a covering. Bows and many quivers, *sk-hhm*, *hrp*-swords, lances, swords and fine weapons belonging to His Majesty. Fine whips of *tjaga*-wood, their straps of red cloth and their tips of inlaid work of Kedy. *Mtd* of Rehob; *sgrt* embellishe anew; long staffs of His Majesty, their grip lated with gold; batons with self-bent rods (Papyrus Anastasi IV, 16:6-17:4 translated by Caminos 1954:53-54).

Pella and Rehob were both involved in the production of chariot parts and that Pella especially was a supplier of a special kind of wood for the chariots.³⁶ The name Pihil (Pelha/Pella) means 'equid' or a horse/donkey in several Semitic languages. Pihil received this name at least in the Middle Bronze Age and perhaps earlier. The 'equid' of the Middle Bronze Age would

³⁶ Ahituv suggests that Papyrus Anastasi IV:17 is 'a fictitious administrative document, composed for the purpose of training scribes' (Ahituv 1984:41). The context of the section is not just for the preparation of a military campaign to Canaan but for the writing practice of an apprentice scribe.

most likely have been the Onager. The Onager was native to Transjordan and was in demand as a beast of burden throughout the Levant. This suggests that Pella was also involved in the buying and selling of horses. It is not a far stretch to relate the buying and selling of horses to the development of an industry manufacturing horse-drawn carts or chariots. The forested hills of the eastern escarpment around Pella would have provided a resource of wood to support this industry (cf. Smith 1987:54-56).

- **Ceramics:** Ceramics are a staple artifact on sites of the Late Bronze Age. Demand for this disposable and reusable product must have created many local and regional production sites. The clay of the Jordan Valley, especially near the town of Mahis, 17 kilometers (10.5 miles) north of the Dead Sea, is especially rich in kaolin making it well suited for the production of ceramics (Bender 1974:168).
- **Quarrying and stone work:** Decorated stones in the form of travertine were a possible product of the Jordan Valley. A possible quarry site on a large deposit of quality, polishable travertines exists 10 kilometers (6.2 miles) south of Dayr 'Alla in the Zerqa triangle (Bender 1974:172-173) although no clear evidence of Late Bronze Age exploitation is available.
- **Mining:** Two natural resources of the Southern Jordan Valley that one would expect to be exploited are bitumen and salt. Both of these resources are available around the Dead Sea. The first known records of a bitumen industry around the Dead Sea come from the Nabataean and Roman periods (cf. Hammond 1959). The only Late Bronze Age evidence of the use Bitumen from the Late Bronze Age IIB cemetery at Tell Sa'idiyeh where several bodies wrapped in textiles were either dipped in or smeared with Bitumen in a mummification process (Pritchard 1980:21-23). No ancient epigraphic source describes salt production around the Dead Sea, the Madaba Map, dating to the 6th century AD, depicts two ships carrying reddish and grey material that some scholars have interpreted as salt which would represent a salt industry (cf. Bloch 1971:186-190). Both these resources were available in the Late Bronze Age and required little technology to harvest. But no historical or archaeological evidence points to the exploitation of these resources except

from the time of Abraham, 'the Valley of Siddim was full of bitumen pits' (Genesis 14:17). During the Monarchical period of Israel, the historical record has copper/iron smelting in the valley around Succoth (1 Kings 7:46). Some of the earliest iron furnaces known to man are at Tell Hammeh. Three furnaces and heavy ash and slag layers suggest a large scale iron smelting industry in the Iron Age at this site (Van der Steen 2004:147). There is no evidence, though, that the iron ore and other natural resources were exploited prior to this period.

2.3.3.2 Agriculture

There are only two direct historical references to crops being grown in the Jordan Valley. Amarna letter 224 references the destruction of the crop destined as tribute to Pharaoh, 'As to the king, my lord's, having written for grain ..., it has been destroyed. May the king, my lord, ask his commissioners whether our ancestors, since the days of Kusuna, our ancestor, always shipped [grain]' (EA 224 translated by Moran [1992]). The Israelite spies at Jericho refer to the flax harvest as they hid, 'she had brought them up to the roof and hid them with the stalks of flax that she had laid in order on the roof' (Joshua 2:6). The archaeological records from Pella, Deir 'Alla and Jericho show a great number of other grains and cereals that were grown in the valley. They include barley, free-threshing wheat, linseed, chick-peas, emmer, horse beans, figs, grapes, grass, bitter vetch, broad beans, and lentils (Van Zeist and Heeres 1973:21-37; McNicoll et al 1992:255). Olive trees were also cultivated as inferred by charcoal remains from Late Bronze Age Deir 'Alla (Van Zeist 1985:203).



Figure 2.48: Modern agricultural fields of the Jordan Valley
 Photo taken from Tell Sarum (Rehob) looking east towards Pella
 (Photo: <http://www.biblewalks.com/sites/Rehov.html> accessed on October 6, 2011).

Imported pottery and suggestions of exports of wine, oil and grain in commerce and tribute suggest a general surplus of agricultural produce. An Amarna letter from Cyprus suggested that Canaan (including the Jordan Valley) was known for its agricultural exports:

Now, my brother, I have prepared much copper [...] May the ships be many, send (them) here. The copper [...] since they have prepared much copper. Grain [in] ships from the province of Canaan [send to me as in] former [days], so that I may make bread [...](EA 36 translated by Moran [1992]).

Fertile soil and water are the key ingredients for successful agriculture. It has already been noted in section 2.2.2.2 that the northern section of the valley had both fertile soil and water from precipitation and numerous river wadis and springs. In the central and southern sections, the water and the high salinity of the soil conditions made farming in the Jordan Valley difficult. Where there was good soil and water, the climatic conditions caused cereals, fruit and vegetables to ripen several weeks earlier than anywhere else in the region (Van der Steen 2002:22). These fertile soils are limited to the alluvial fans of the wadis and the flood plains in the Zor.

Rain levels in the north of the valley (300 mm a year) are suitable for many crops. The central section (primarily the east side as it is not as deep in the rain shadow of the western highlands) receives enough rain (>150 mm/year) to make dry farming possible but very risky. The Jordan River could be counted on to irrigate the Zor but

is too deep to irrigate the Ghor without mechanical means. There is no direct evidence (historical or archaeological) for human irrigation in the Jordan Valley until the Roman period in the Zerqa triangle and at Phasaelis (cf. Kaptijn 2009:322; <http://www.biblewalks.com/Sites/FazaelBrook.html> accessed 3 September 2011). Irrigation practices must have been present in the valley in early periods (i.e. as Jericho was famous for its date exports in the Hellenistic period (Smith 1974:182) and to meet the export quantities that Egypt demanded (EA 36, 224, 337).

Kaptijn, in her survey report on the Zerqa Triangle concludes, 'No doubt that Iron Age communities in the Zerqa Triangle practiced some form of irrigation' (2009:322). Since there is no archaeological evidence for this, Kaptijn makes a compelling case using the topography of the Zerqa Triangle and a detailed survey of the various Iron Age sites. Assuming that each settlement would have fields around it (as people would not walk many kilometers for daily work in the fields), Kaptijn plotted the 19 Iron Age settlements in the Zerqa Triangle and shows, via topography, that run-off irrigation via dams at higher points in the Ghor, near the escarpment, would not supply water to these sites and their surrounding fields. Canals, although labor intensive, were the most logical option to supply all the settlements and their surrounding fields with water. There is some evidence that the Romans used a canal system in the Zerqa's alluvial pan and, from the late 19th century to the present, canals are being used. Early 20th century maps show one such canal going right to the base of Tell al-Khsas. Using this indirect deduction, Kaptijn makes a strong case for a canal system in this part of the valley during the Iron Age. Regarding the Late Bronze Age, Kaptijn applies the same logic noting that 11 of the 16 Iron Age sites in her survey showed evidence of Late Bronze Age occupation (Kaptijn 2009:322-325).

Wells could also have been used for irrigation. However, the underground water level varies through the course of the valley, ranging from 100 meters (328 feet) at the base of the escarpment to 5 meters (16 feet) close to the Zor (see 2.2.2.6). Archaeology has discovered only one identified well dated to the 12th century BC at Tell es-Sa'idiyeh on the edge of the Wadi Kufrenji on the Ghor/Qattara border. The well extends six meters below the surface (Tubb 1998:84-85) (4.2.2.6). Wells could

have existed in a number of settlements but the water levels and effort required to raise the water would not have made it very practical for farming.

Pritchard discovered a water system at Tell Saidiyya (1985:57-59). The lowest part, a semicircular chamber fed by an underground spring, was cleared by Miller (Tubb 1988b:84-88). It had a paved area around the pool and a covered stairway to the top of the Stratum XII of the Tell (Stratum XII includes the Egyptian residency) (Tubb, Dorell & Cobbing 1996:35-36).

The same settlement pattern and topography of the Iron Age existed in the Late Bronze Age. Therefore one can deduce that a similar canal system could also have been in use. The possibility of course changes of the Zerqa/Jabbok River has already been mentioned in section 2.2.2.6.1. Kaptijn makes no mention of this in her study. However, the size of the alluvial fan and spread of the 16 Iron Age sites (11 with Late Bronze Age occupation) would still need a canal system to distribute water to each of the sites.

The topography of the whole central and southern sections of the Jordan Valley is very similar to that of the Zerqa's alluvial fan. The alluvial fans of these sections are relatively flat, sloping away from the wadi down towards the Jordan River. Canal construction in these conditions requires labor but very little engineering or technology, using gravity to feed the system. The Egyptians were certainly practicing this system all along the Nile River. With the Egyptian presence in the Jordan Valley (see chapter 3) and their request for grain shipments from the valley (EA 36, 224 and 337), this technology would certainly have been shared if not already present. Irrigation canal technology was probably in use throughout the Jordan Valley.

Livestock

Gilead and Bashan are mentioned in the literature as being excellent areas for herding. (Numbers 32:1, 26; Deuteronomy 32:14; Joshua 21:27). The general tribute/booty lists of the Pharaohs returning from Canaan often mentioned horses and oxen. The archaeological digs at Pella, Deir 'Alla and Jericho (Van Zeist and Heeres 1973:21-37; McNicoll et al 1992:255) reveal the bones of sheep, goats,

horses, donkeys, domesticated pigs, camels, and cattle (both western European and the Zebu from East Asia) (Strange 2001:294; Van der Kooij & Ibrahim 1989:39-42). Horses were previously mentioned when discussing Pella's chariot industry (section 2.3.3.1).

2.3.3.3 Trade/commerce

The northern and central parts of the valley are located on international and regional trade routes that would facilitate trade and commerce of agricultural and industrial goods. Beth-shan, Rehob, Pella and other cities of the northern valley were, in effect, 'gate-ways' of commerce to and from the port of Akko on the Mediterranean and the coastal highways to the cities of Transjordan and beyond on the strategic routes from the King's Highway (cf. Leonard 1987b:265; Knapp 1993:24-28,87). From Beth-shan, Rehob and Pella, goods would travel south to Tell Saidiyya, Tell Dayr Alla, up to Amman and to points further south. Goods could also travel directly to Irbid and north-south on the central eastern plateau of Transjordan. Caravans also traveled to and from Bashan, Damascus and beyond. Mycenaean and Cypriot pottery has been found at various valley sites and at points further east and pottery from southern Palestine has been found at Tell Fukar (McGovern 1997: 423-424; Figure 4.4). This demonstrates active commerce across the routes of the Jordan Valley in the Late Bronze Age.

Outside of the agricultural and possible horse trading mentioned above, some listed exports from the general region are wines and oils as mentioned in Egyptian texts as general commodities from Canaan (Redford 1992:212). This idea may be supported by the finds of the collared rim jars in the Jordan Valley and Transjordan. The jars could have been used for the transport of these liquids from production sites to the harbor at Akko (Wengrow 1996:310-326).

The nature of the imports and what was transported in the Mycenaean and Cypriot ware found at various Jordan Valley sites can only be guessed at. It has been suggested, mainly due to the closed pottery forms, that the Mycenaean vessels contained specialty oils and other unguents (Leonard 1987b:262-264). Merrilees

suggests that the Cypriot Base Ring pottery may have been formed in imitation of the opium poppy and used for the wide-spread trade in opium to Egypt and the Near East (1962:287-292). Trade routes certainly existed to the Far East in earlier times as evidence from several Chalcolithic and Neolithic sites around Tell Shuneh, Tuleilat Ghussul and Jericho in the Jordan Valley. Lapis from the Zargos Mountains in Iran as well as obsidian from Anatolia and Turquoise from the Sinai³⁷ was found at these sites. Bronze analysis of tomb items at Pella show that some of the material originated in Anatolia (see 4.2.1.3). The Jordan Valley was certainly integrated into the regional and international trade network of the Mediterranean and the Levant.

2.4 SUMMARY

The physical and human geographical data presents the Jordan Valley as being divided into two sections: the north-central and southern sections.

Physically, the Jordan Valley is one well defined unit with a flat floor consisting of the Ghor, Qattar and Zor, bordered by a steep escarpment with only one opening at the Beth-shan/Harod Valley. Its deep north-south axis cuts the southern Levant in half, making a distinct boundary between the eastern and western highlands whose deep east-west wadis direct all international movement to either the western coast or the eastern desert. The Jordan River divides the valley between east and west along its full length. Although the flood waters of January through March would prevent reliable travel between the two sides, the river appears to have played more of an identification boundary rather than a physical one.

Within the valley, soil, precipitation and temperature divide the valley into two environments. The northern and central sections are conducive to dry farming over the vast majority of the Ghor. In the south, farming is limited to the much smaller alluvial pans close to the escarpments where surface water is available. In this, the widest part of the valley, the farming areas are separated by large sterile zones.

³⁷ W. Finlayson and A. Simmons. Neolithic Trade in Jordan, Fulbright Lecture Series, American Center of Oriental Research, Amman January 23, 2001.

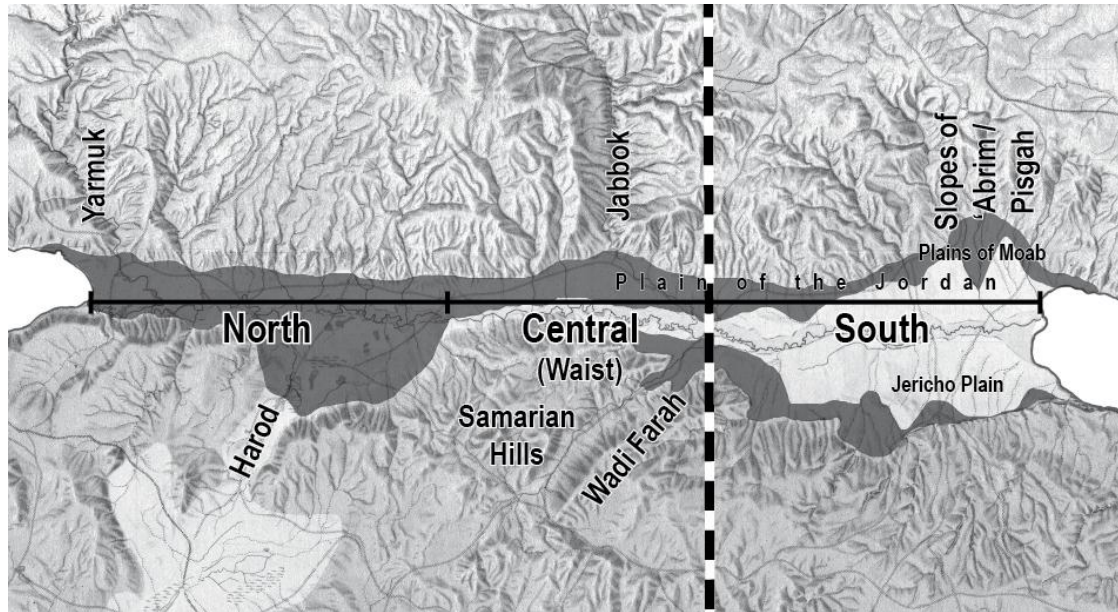


Figure 2.49: Geographic divisions of the Jordan Valley: Agricultural soil
The availability of agricultural land separates the south end of the Jordan Valley from the northern sections
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

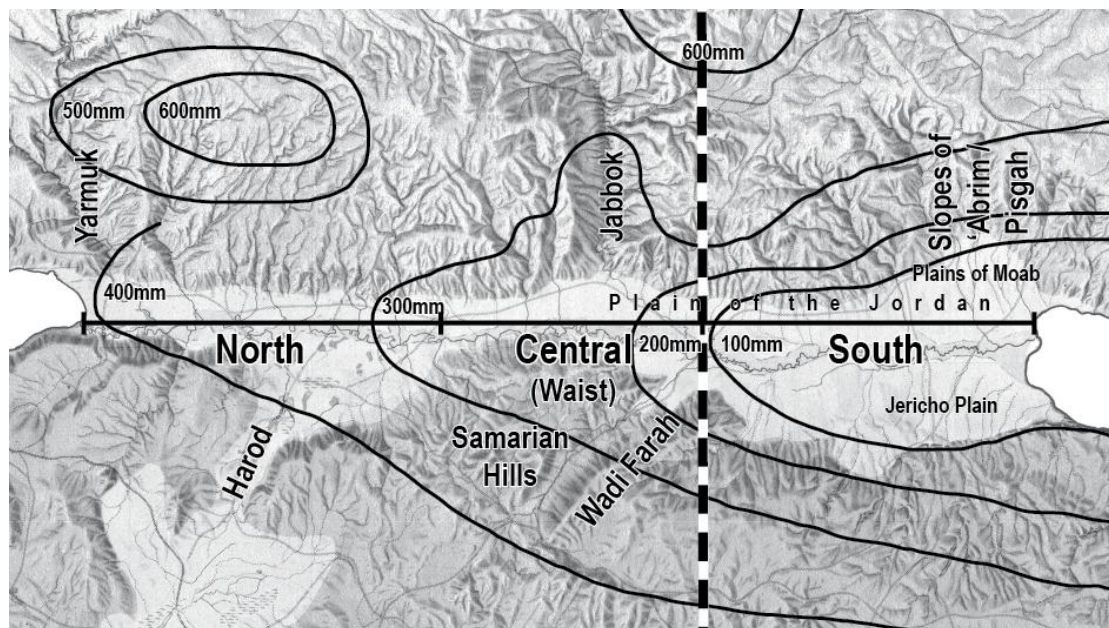


Figure 2.50: Geographic divisions of the Jordan Valley: Precipitation pattern
Rainfall patterns and the ability to dry farm divides the south from the two northern sections of the Jordan Valley
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Population and settlement patterns naturally follow the conditions and resources for agriculture. The north and central sections are dense and compact in the number of sites and the corresponding population figures. The south is relatively sparse and scattered in the number of sites and population figures.

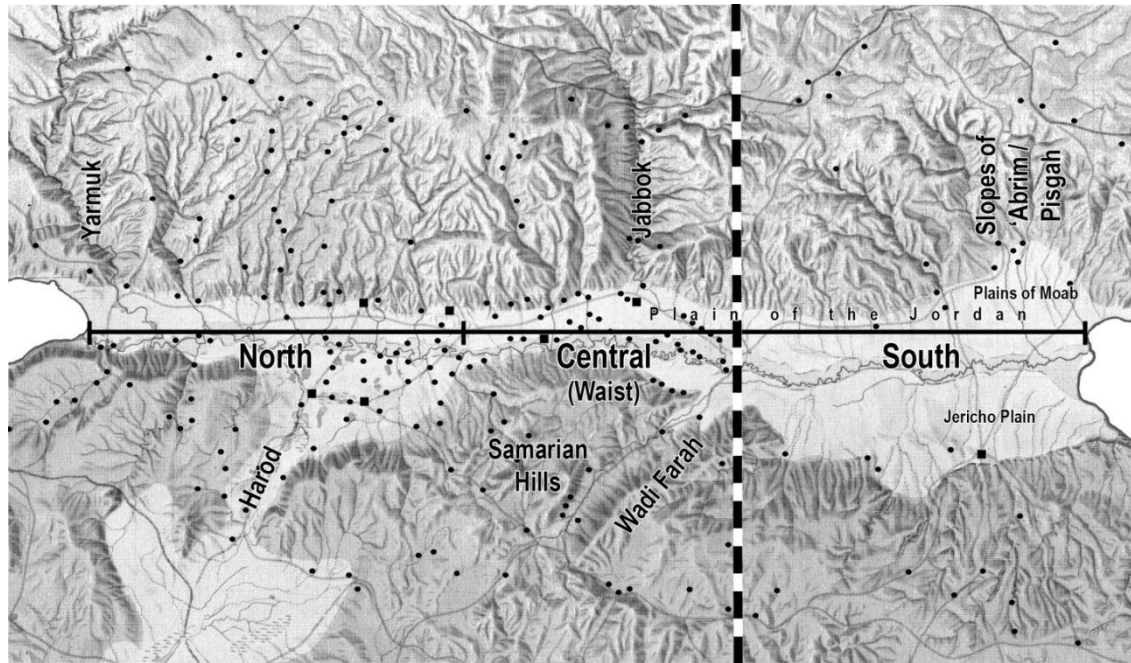


Figure 2.51: Geographic divisions of the Jordan Valley: Settlement pattern
Settlement patterns of the Jordan Valley show a divide between the south and the central sections
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Economically (and one would think politically and socially as well), the differences between the north-central section from the south are compounded by the primary international and regional routes entering and exiting the valley, being in the north (the Harod/Beth-shan valley, northern fords, the Yarmuk/Pella ridge routes) and at the border between the central and southern sections (the Farah Valley, Fords of Adam, Wadi Jabbok).

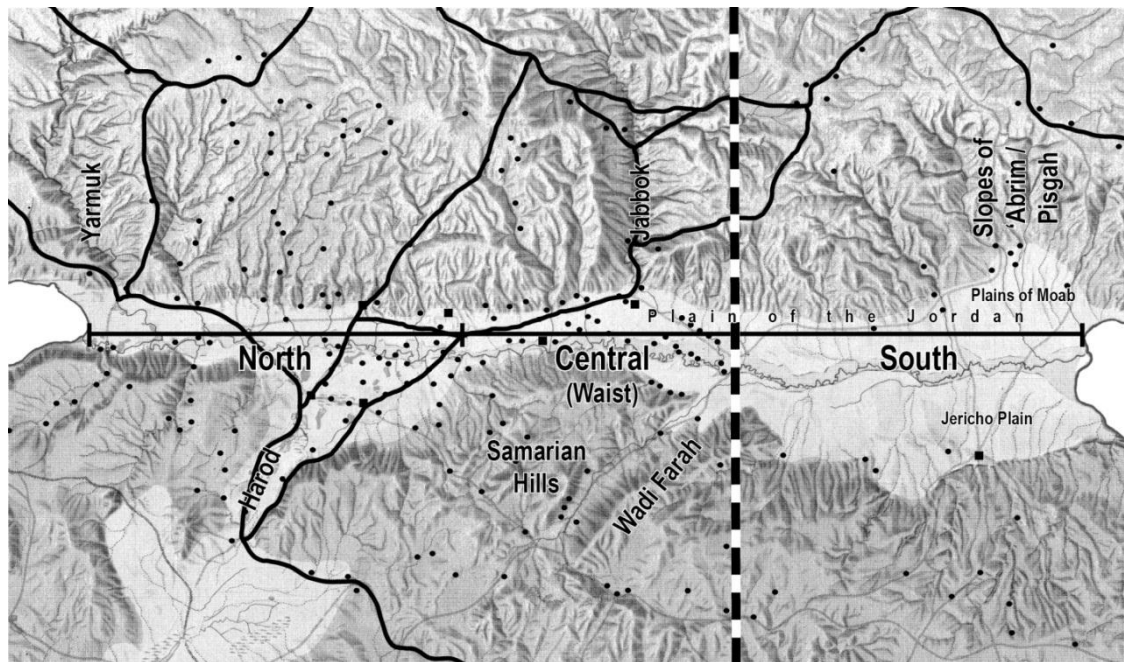


Figure 2.52: Geographic divisions of the Jordan Valley: Transportation routes
The primary international routes for extending political, military and economic influence bypass the southern section of the Jordan Valley (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

These factors of physical geography and human movement isolate the southern population, not just from the north-central section, but from other inhabitants of the south. For instance, the historical sources suggest that the Canaanites of Jericho tolerated the presence of the Israelites on the far side of the valley on the Plains of Moab (the Jericho forces pursued the spies only as far as the Jordan [Joshua 2:7]). The inhabitants of the eastern highlands did not directly confront the Israelites while they camped on the Plains of Moab but hired Balaam from Pethor in distant Mesopotamia (section 3.3.3) to come and curse the Israelites (Deuteronomy 23:4). Some of the forces of the western highlands sought to make political alliances with the new arrived Israelites instead of fighting them (the Gibeonite treaty of Joshua 9:1-27). This is directly opposite of the Egyptian records revealing the Canaanites of the northern section unifying in opposition against the Egyptian armies (3.2.1.4).

Although the populations of all three sections of the Jordan Valley would have been connected by the similar lifestyles and culture of agrarian societies, the Southern Jordan Valley can be considered a separate unit from the north and central sections of the Valley (due to settlement patterns, soil, rain and transportation routes). The southern section is not totally isolated as east-west movement connecting to the

highlands and international highways from and through the southern section could still be accomplished via regional and local routes without going through the crowded central and northern sections.

The second question of this thesis, 'to what extent was the Central Jordan Valley interacting with the eastern-western highlands and the larger region during the Late Bronze Age?' will be better answered in the chapters on history and archaeology. The physical and human geography clearly show that the Jordan Valley was well linked with a 'road system' into the eastern and western highlands and that travel between these regions could be accomplished within a reasonable amount of time and energy.

Mapping the archaeological sites within their topography shows a clear pattern for the establishment of a Late Bronze Age 'road' network for communication and commerce. There were at least 12 routes on the east and 13 on the west. The eastern side had at least three international routes to the King's Highway (routes A, B and O). There were at least three regional routes in each section of the Jordan Valley connecting to the eastern highlands; in the north (C, D and F), in the central (N and O – both branches) and in the south (P, Q and R). Smaller, more difficult or indirect routes (E and N) provided more local routes to and from the highlands. The western side had one main international route with two branches (J and K). Regional routes also provided access to points along the international highway (Route G in the north) but primarily connected to the central ridge route of the western highlands, from the northern section (routes L and M), from the central section (route S) and from the south (routes U and V). Smaller indirect routes (H, J, T and W) provided access to more immediate sites in the highlands but eventually still connected with the key north-south ridge route.

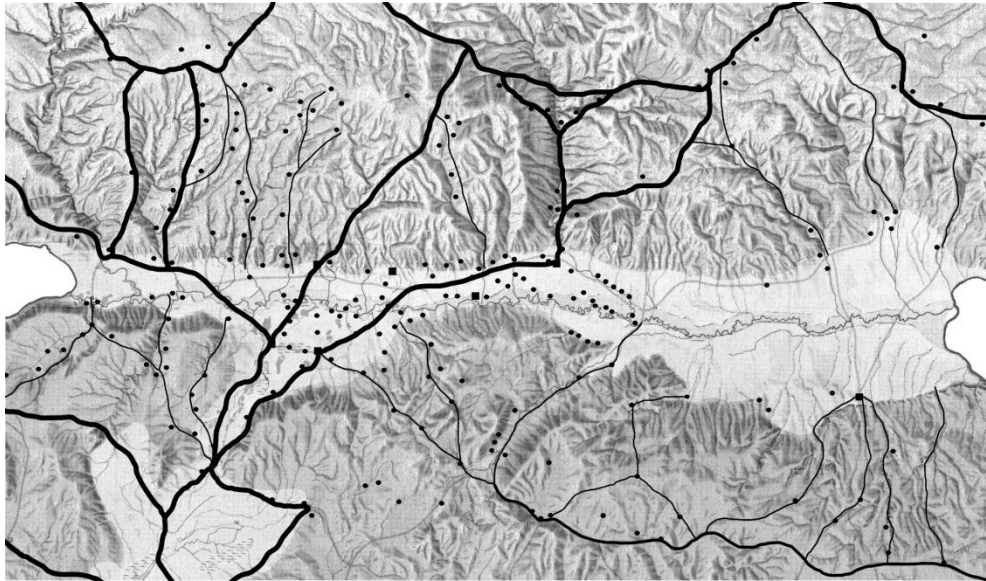


Figure 2.53: Connections between the Jordan Valley and the highlands

The dark wide international routes followed by lighter regional and local routes demonstrate the Jordan Valley was well connected to the eastern and western highlands (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

The only gaps of established Late Bronze Age routes into the highlands are between the Wadi Zerqa and Wadi Shu'ieb on the eastern side and the western escarpment of the central 'waist.' Topography allows for ridge routes in both these gaps, and there is some evidence that in the following Iron Age, routes were established in these sections (cf. Dorsey 1981; 1991) but there are no archaeological sites along the route to infer that these were in primary use during the Late Bronze Age. Traffic in and through the Jordan Valley had numerous options (on the average every 17.5 kilometers [11 miles], actually less in the populated northern section). The deep east-west wadis that fracture the highlands and push north-south travel to the coast or to the eastern desert require 'gateways' through the Jordan Valley that connect and facilitate travel between these international highways. The northern and central sections and, if necessary, the east side of the southern section, provide these main routes. On a regional and local level, each section of the valley provides several access points to the eastern and western highlands. Chapters 3 and 4 will explore the use of these routes according to the historical and archaeological records.

CHAPTER 3: A HISTORICAL SURVEY OF THE JORDAN VALLEY IN THE LATE BRONZE AGE

3.1 INTRODUCTION

This chapter will review the written history from available sources of the Jordan Valley and the influential border areas during the Late Bronze Age. The two questions being asked of the various texts are:

- was the Jordan Valley an integrated geographic/economic unit and
- to what extent was the Central Jordan Valley interacting with the eastern -western highlands and the larger region during the Late Bronze Age?

The summary of the historical texts will be integrated with the geographical and archaeological chapters looking for common political, economic and cultural threads in order to answer the two questions above.

The Mesopotamian powers were aware of Palestine in the early second millennium BC. The first clear mention of Palestinian cities is from the royal archives in Mari on the Euphrates from the 18th century BC. These archives briefly mention Hazor and Laish (ANET 1955:482). Before the first millennium, there are only vague references to Palestine and Syria (Amurru), the Sea of Amurru (the Mediterranean), the Lebanese mountains and perhaps Bashan (Aharoni 1979:96). The various Mesopotamian powers were aware of the geography and economics of the southern Levant and the Jordan Valley because there were detailed exchanges between Egypt and the northern powers over issues affecting this region. But at this age of development, only the Egyptian side of the exchange is known.

Outside of several caches of clay tablets with text found at Deir 'alla whose language has yet to be identified or understood (Van der Kooij 1989:63, 70; 1993:338-342; cf. Ibrahim and Van der Kooij 1997 and Kafafi 2009:127; see 4.2.2.1), two cuneiform tablets found at Pella and one at Jericho (each too eroded or fragmented to be read) (Potts 1987:59; Garstang 1948:122), the known Palestinian epigraphic sources were written under the influence of Egyptian policy. The letters from Taanach and Amarna

as well as the Beth-shan stelae are written for Egyptian audiences or by Egyptians.

This chapter will first examine the Egyptian sources in chronological order followed by the relevant Biblical texts.

3.2 EGYPTIAN SOURCES

3.2.1 The 18th Dynasty: Late Bronze Age I and II (15th and 14th century BC)

3.2.1.1 The first three Pharaohs of Dynasty XVIII; Ahmos (1550-1525), Amenhotep I (1525-1506) and Thutmose I (1506-1493): Late Bronze Age I

With the exception of a broken doorjamb with an incomplete inscription in Karnak, all historical data on Egyptian activity in the southern Levant for the first three Pharaohs of the New Kingdom comes from one contemporary source: the tomb inscription of an Egyptian military officer named Ah-mose, the son of the woman Ebana. The tomb is labelled number five at el-Kab, eighty kilometers south of Luxor. The biographical tomb inscription from the 18th Dynasty which relates to the Jordan Valley area, states that Ah-mose served under Pharaoh Ah-mose I during the expulsion of the Hyksos and the founding of the 18th Dynasty. He also served under Amen-hotep I and Thutmose I (ANET 1955:233; Benderitter 2009).

His tomb inscription recounts his military career under the first three Pharaohs of the New Kingdom and throughout his career, Egypt's march and re-engagement with the Levant is clearly recorded. This paper picks up the account after the capture of Avaris and the Delta, when the Egyptian forces moved north east towards the entrance of Canaan at Sharhan:

And so Sharhan was besieged three years, and thus his majesty captured it. Then I carried off spoil from there: two women and a hand. And thus the gold of valour was given to me, now my spoil was given to me for slaves (ANET 1955:233, Line 15).

Building on Albright's work and combining references to Sharhan and neighboring cities from the topographical lists of Thutmose III, Rainey and Notley (2006:74-75) identify Sharhan with Tell el-Far'ah in the western Negeb. And thus the 18th Dynasty begins with Egypt projecting its power north. The record then goes silent on

what Egyptian forces are doing in the southern Levant for the rest of Pharaoh Ah-mose I and Amen-hotep I's reign as Ah-mose, son of the woman Ebana, continues his career campaigning in Nubia (columns 16-36 in tomb five).

Ah-mose, son of the woman Ebana, returns to the Levant under Thutmose I. Thutmose I was now in the northern Levant in Nahrina, the Semitic name used by the Egyptians for the north Syrian territory of Mittani (Rainey & Notley 2006:64):

Afterwards he sallied forth against Retenu to satiate his appetite throughout the foreign lands. His majesty got all the way to Nahrina. And his majesty, blessed be he, found that enemy while he was still marshalling his troops. So his majesty made a great carnage among them, while there was no counting the captives that his majesty brought back from his victories, I being in the van of our army (ANET 1955:234 line 37).

There is one possible testimony from the reign of Amen-hotep I. A fragment of a limestone doorjamb (mentioned in the first paragraph of this section) found in Karnak depicting Qedem, 'the east' and other personified locations in Asia bringing offerings to the Pharaoh. Although the name of the Pharaoh receiving the gifts is unclear, Redford dates the fragment to Amen-hotep I (Redford 1992:149, Plate 16:150). If Redford is correct, this indicates Egyptian activity in central Syria during Ah-mose, son of the woman Ebana's time in Nubia.

Despite the sparse evidence, Egyptian activity in the southern Levant and Jordan Valley during these first three kings of the 18th Dynasty can be extrapolated. Chapter 2 (Figure 2.2; section 2.2.1.6) showed the interrelationship between the Jezreel and Jordan Valleys and the secondary road system up to the Syrian Plateau. This connection for communication and travel becomes even more evident as later Egyptian texts are explored demonstrating a commonly used route across the Jordan Valley up to the Bashan and towards Damascus (Figure 3.1; section 2.3.2.2.2). As several Dynasty XIX campaigns accessed the Syrian Central Plateau by entering the Jordan Valley via the Jezreel Valley, they crossed the Jordan River and then ascended the eastern slopes via secondary routes along the Yarmuk River (Seti I, Merneptah and Ramesses II).

There are two critical statements in Ah-mose's biographical tomb inscription that shows that the southern Levant and the Jordan Valley was under at least nominal Egyptian control by the time of Thutmose I's campaign to Retenu. These two statements are:

1. *"His majesty got all the way to Nahrina"*
2. *"And his majesty, blessed be he, found that enemy while he was still marshalling his troops."* (ANET 1955:234, Line 37).

Redford, Rainey and Wilson each emphasize the grammatical structure of these two lines as being very specific. The lines do not follow the normal pattern of classical Egyptian during the period they were written. In the first line, the emphasis is on the personal pronoun of 'his majesty' rather than the normal construct focusing on the verb of arriving in Nahrina. The second line is not a prepositional phrase as expected but a circumstantial clause. Thus the focus is on the condition of the enemy (being caught by surprise) who were found by 'his majesty' (Redford 1979:275; Rainey & Notley 2006:64).

The scribe of this tomb inscription was making a point that the king caught the enemy *while* he was still assembling troops. Either the commanders of the Nahrina forces were completely inept and ignored the approaching Egyptian threat until it was too late or Thutmose I caught them by surprise.

Catching the forces of Mittani off guard in Nahrina would necessitate a quick, unmolested and unreported journey through the southern Levant. There are no records describing the route Thutmose I took to Nahrina. It is safe to assume that the Egyptian forces followed the coastal roads through the Jezreel Valley and further north staying on the main road while being supported by ships. Still, communication routes between the Jezreel and the Jordan Valley would need to have been in friendly hands or at least controlled by Egyptian forces in order to prevent early warning of a moving army passing to Nahrina via the eastern routes across the Jordan Valley and along the secondary routes up the eastern slopes to the central Syrian plains.

According to this inscription, the Egyptian campaigns of the first three Pharaohs of Dynasty XVIII resulted in control of the southern Levant, including the Jordan Valley, as attested by Egyptian control of the communications moving north. A free population unfriendly towards Egyptian forces would have certainly passed on warnings of Egyptian movement to garnish support and endearment of the northern powers or simply to spite their Egyptian enemy.

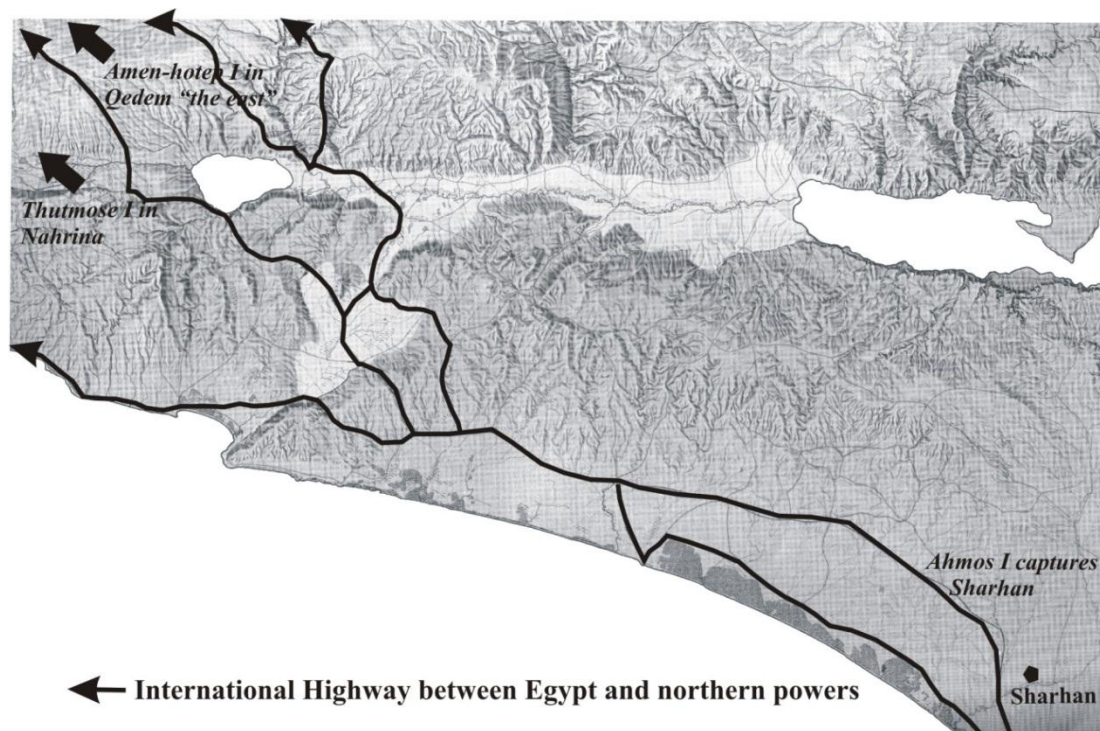


Figure 3.1: Possible routes of Amenhotep I and Thutmose I to Nahrina and Qedem based on natural routes and later recorded campaign routes
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

3.2.1.2 Pharaoh Thutmose II (1493-1479): Late Bronze Age I

There is no evidence for any Egyptian activity in the Jordan Valley under Thutmose II. For all of Canaan, there is only one record of a small punitive expedition against the Shasu in the Negeb (Giv'eon 1971:9-10; Redford 1992:153).

3.2.1.3 Pharaoh Hatshepsut (1479-1457): Late Bronze Age I

Hatshepsut is best known for focusing on Egypt's domestic issues and not her use of the military (Redford 1967:80). There is one record which reports on a mission to Byblos for cedar, mining in the Arabah as well generic formulative references to the remaining chiefs of Syria (Redford 1992:152-53 referencing the inscriptions of

Hatshepsut at Serabit el-Khadim dated to years 5, 11 and 13). There is another very brief description of Canaan in *Urkunden der XVIII Dynastie*, Helck (1955-58:372 lines 2-11)³⁸ from Hatshepsut. Redford (1992:152) describes the account as so generic and formulaic that he believes they are from the time of Thutmose I. But something was happening in the southern Levant towards the end of Hatshepsut's reign, for there is a possible campaign by her son Thutmose III as co-regent to Gaza (Redford 1967:60) and Thutmose III's first foreign campaign as Pharaoh was to put down rebellions in the southern Levant (Aharoni 1979:153). That Canaan is described as being in rebellion against Egypt implies some earlier Egyptian control of Canaan during the previous 22 year reign of Hatshepsut.

3.2.1.4 Pharaoh Thutmose III (1457-1427): Late Bronze Age I

From the reign of Thutmose III, the annals recorded on his temple in Karnak provide several narrations of his seventeen campaigns in the Levant. All but the first campaign are in the northern Levant. His first campaign with its seven month siege of Megiddo is described in detail at the Temple of Karnak. The Gebel Barkal Stele from Nubia also recounts the victory at Megiddo.

The general picture of the southern Levant during the early years of Thutmose III is of rebellion:

Regal year 22, fourth month of the second season, day 25 [His majesty passed the fortress of] Sillu on the first campaign of victory to subdue the aggression against] Egypt, in valour, [in victory, in might and in justification]. Now [ist], for a period of many years there was enmity [throughout that land], every man plundering in enmity against his neighbour... it happened, however, in the later times, that the [garrison] troops that were there were in the town of Sharhan, while beginning with Yarza to as far as the end of the land had fallen into rebellion against his majesty (ANET 1955:235, lines 8-11).

³⁸ *Urkunden der XVIII Dynastie* is a collection of Egyptian hieroglyphic documents translated into German. It began in 1906 under the editorship of Kurt Heinrich Sethe. It is usually cited as Urk. IV. Helcke completed the German translation in 1955-58. An English translation of the German for facsimiles 17–19 is published as *Egyptian Historical Records of the Later Eighteenth Dynasty* by Barbara Cumming (1984).

The annals of Thutmose III accuse the southern Levant as being in a state of turmoil for many years, eventually entering a state of rebellion against Egypt. The topographical list of this campaign names 119 vanquished cities revealing that the turmoil and rebellion was widespread from Gaza (Thutmose III's possible Gaza campaign as co-regent with Hatshepsut [Redford 1967:60]) through the Coastal Plain, the Jezreel and Jordan Valleys, the Bashan and northward to Qadesh.

The campaign was more than a march against individual cities. The cities of the region had banded together to confront the Egyptian army as it entered the Jezreel Valley. Representatives of the powers of the northern Levant were also present as shown in the annals report of the war counsel at Yahma before the Egyptians went through the chalk passes into the Jezreel Valley:

In order to speak thus, his majesty called for a consultation with his victorious army:

That [miserable] enemy of Qadesh has come and has entered into Megiddo. He is [there] at this moment, having gathered to himself the rulers of [all the] countries [that were] tributary to Egypt together with those from Nahrina, [Mittanian (?)], Hurrians and people of Qode, their charioteer, their infantry [and their service personnel], (ANET 1955:235, lines 19-24).

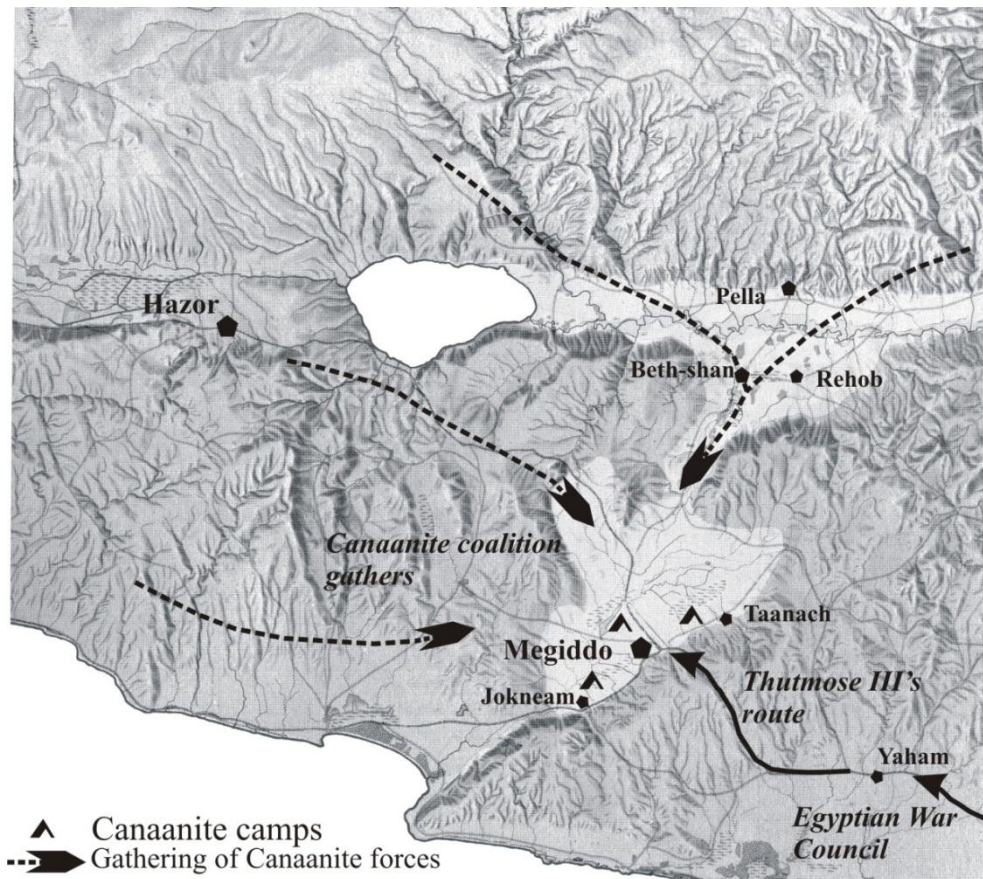


Figure 3.2: Thutmose III at Megiddo

Thutmose III's first campaign: Canaanite forces from the Jordan Valley and the eastern highlands join other Canaanite forces to oppose Thutmose III at Megiddo (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

After routing the enemy on the field of battle, the Egyptian forces sieged Megiddo for seven months until the Canaanite forces surrendered their remaining weapons:

Then that enemy with the rulers who were with him sent all their children out to my majesty, bearing much tribute of gold and silver, all their horses that were with their chariots, chariots of gold and silver with those that were undecorated, all their corselets of mail for combat, their bows, their arrows, all their weapons of warfare (De Buck 1948:56-63, Gebel Barkal stele, Lines 21-24).

The Pharaoh then permitted the rulers to return to their cities after swearing an oath of allegiance:

Then My Majesty ordered that they be made to swear an oath:

"We will not again do evil against Menkheperre [may he live forever!], our lord, in our lifetime, for we have seen his might. He has given us breath as he wishes. His father has done it [...] It is not an act of people." Then My Majesty ordered that they be granted passage to their towns. They all went on donkeys so I could take their horses, after I had also made the

townspeople captive for Egypt and their possessions as well (De Buck 1948:56-63, Gebel Barkal stele, lines 24-25).

Although victorious, Egypt does not appear to take direct administrative control or maintain a large occupying army in the area. Egypt implemented an administrative policy that would be in use for many years (Redford 1992:198-213). The defeated leaders, after swearing an oath of loyalty, were allowed to return to their cities. The Egyptians governed Canaan through local leaders, requiring them to provide tribute, taxes, and provisions for Pharaoh's armies when called upon. The local leaders were encouraged to be loyal with the threat of small garrisons of Egyptian military personnel and visits by regional Egyptian governors stationed in key cities (Gaza, Joppa, Megiddo and Beth-shan). Many sons of the local rulers are also sent to Egypt as hostages (Redford 1992:198-213; 2003:255-257). Rainey describes the situation by saying that 'the Egyptian policy of control of Canaan was through local rulers holding office by appointment from Pharaoh and their sons were taken to Egypt as hostages for training and indoctrination' (Rainey & Notley 2006:67).

Some of the land was taken over with the aim of reserving their produce for Egypt:

Now the fields were made into arable plots and assigned to inspectors of the palace ... in order to reap their harvest. List of the harvest which his majesty carried off from the Megiddo arable plots: 297[...]300[...]sacks of wheat, apart from what was cut as forage by his majesty's army (ANET 1955:238).

The topographical lists of the defeated towns from this campaign are listed on pylons six and seven at the Karnak Temple. Out of the 119 town names listed, roughly half have been identified. There is not enough information to determine if each individual city was attacked and defeated or merely surrendered at Megiddo or upon arrival of the Egyptian forces at their doorstep (Rainey & Notley 2006:68). Therefore, it is difficult to say with any certainty that this first campaign saw Egyptian troops marching through the Jordan Valley and Trans-Jordanian highlands. However, a number of the identified cities on the topographical list are in the Jordan Valley and Bashan.

The towns in the Jordan Valley and near vicinity are listed in the following table (Table 3.1). The table is edited from Topographical list: First campaign of Thutmose

III (http://www.archaeowiki.org/Topographical_List%2C_First_Campaign_of_Thutmose_III Accessed on 11 January 2010 accessed 11 January 2010) and compared with Rainey's translation (Rainey & Notley 2006:72-74).

Jordan Valley cities and Transjordan cities that would necessitate crossing over through the Jordan Valley from Karnak Temple pylon six and seven.

Table 3.1: Transjordanian cities of Thutmose III's Karnak Temple pylons six and seven (cf. Topographical list 2008)

Number	Transcription	Identification	Discussion
15	Abila/Abel	Abil es-Su	Translated as stream. Ahituv places this listing in the northern Bashan, near Damascus (Ahituv 1984:44)
21	Srn	Sharon	Corresponds with to Saruna in the Bashan
23	Ba-sa-na	Busruna	Bashan area, correspond with Busruna listed in EA 201
28	Strt	Astarte	Bashan area, corresponds with Astarti listed in EA 364. Identified with Tell Ashtarah
29	(j)nrp	Nurpa/Raphon	Bashan, identified with er-Rafe near the Yarmuk
33	Pa-hi-l	Pella	Jordan Valley, identified with Tabaqat Fahl
34	Knnrt	Kinneret	Southern shores of the Sea of Galilee, identified with Tell Kinrot/Tell el-Oreimah
38	Snm	Shunem	Possible Sunama of EA 365 in the Bashan
51	Sms Jtm	Shamash Edom	Identified with Qarne Hattin overlooking Jordan Valley
52	'a-nu-har-tu	Anaharath	Identified with Tell Mukharkhash
89	Hi-k-ri-m	Hukkarina	South of Damascus, north of the Yarmuk, possibly at Leja
90	Jbr	Abil	Translated as stream. Identified as the Yarmuk River because of its context (Van der Steen 2004:8)
91	Jtr	Edrei	On the southern side of the Yarmuk River
92	Jbr	Jbr/Jbl	Translated as stream. Identified as the Zerqa (Jabbak) River (Van der Steen 2004:8)
96	Krmn	Karamin	Transjordan near Na'ur
98	Tpn	Dibon	Transjordan
99	Jbr	Jbr/Jbl	Possible Wadi Mujib (Van der Steen

			2004:8)
100	Yrt	Yarut	Karak
107	'mq	"a valley, the Valley"	Given in reference near Beth-shan, this toponym is perhaps to be interpreted as the Beth-Shan Valley
110	Bt Sj(n)	Beth-shan	Securely identified

Of the Jordan Valley cities listed in Thutmose III victories, one cannot assume that each location was attacked and defeated. Some of the rulers might have surrendered at Megiddo or the city itself could have surrendered upon the arrival of Egyptian forces before them. The towns of the Northern Jordan Valley, Beth-shan, Pella and possibly Rehob were involved in the Canaanite coalition that opposed Egypt. Looking at the cities identified in Thutmose III's topographical list, it is probable that Egyptian forces entered the Jordan Valley through the Harod Valley and entered the Jordanian highlands on two routes: either ascending towards the Damascus plateau between the Sea of Galilee and the Yarmuk or the ridge route just south of the Yarmuk ascending towards Es-sheib (possible site of Yanoam). From these two routes, the Egyptian forces secured the southern flank of the Hauron that allowed Thutmose III to rapidly move his troops north and launch his subsequent campaigns north through the Bekaa Valley. The identification of the Transjordanian sites of the Wadi Zarqa, Karamin (near modern Na'ur at the northern boundary of the Madaba Plateau) and subsequent listing of places south along the route known later as the King's Highway is the only reference in the New Kingdom to Egyptian power being directly projected due east and southeast beyond the Jordan Valley (Redford 1982:55-74). The Ba'ula Stele from the Madaba plateau shows Egyptian influence in the pictograph. The dating of the Ba'ula Stele is unclear but most likely it is from the Iron Age or the Late Bronze/Iron Age transition during the reign of Seti I to Ramesses III (cf. Ward & Martin 1964).

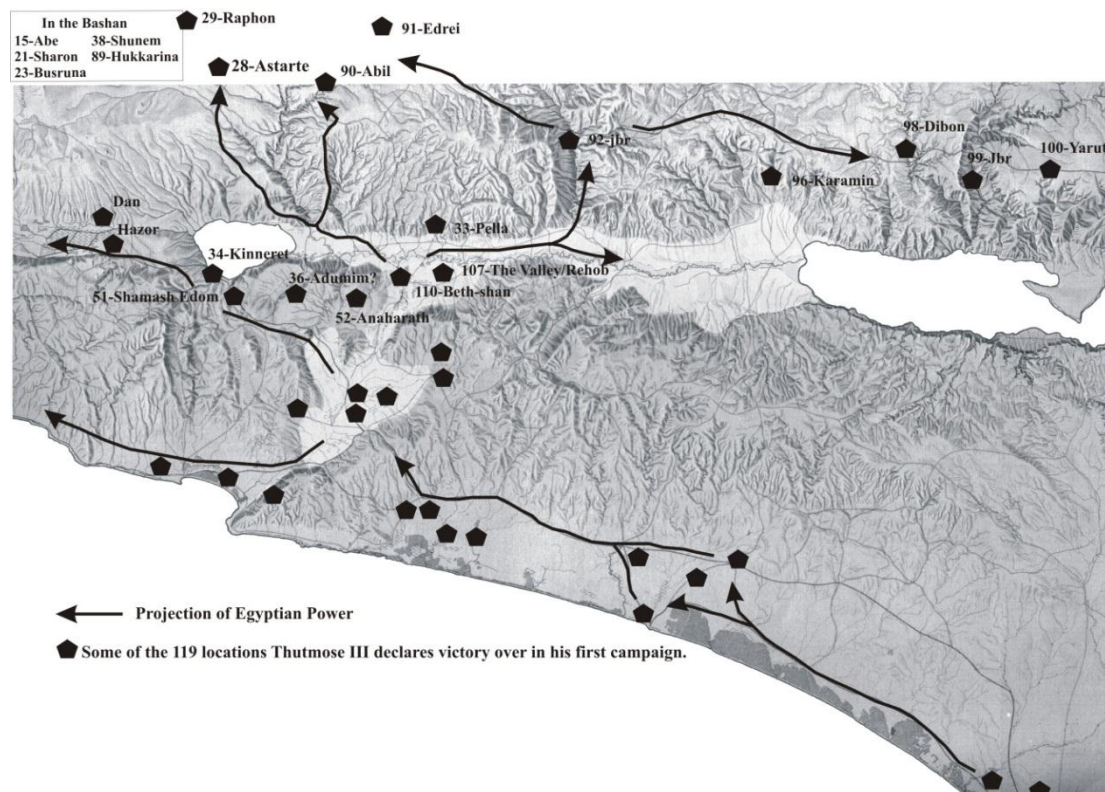


Figure 3.3: Thutmose III's first campaign continues north after Megiddo

After Megiddo, Thutmose III's first campaign continued north, projecting Egyptian power through the Jordan Valley. Numbered cities correspond with those of Table 3.1 (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Thutmose III had at least 16 more campaigns as recorded on Pylon VII on the south side of the Karnak Temple. All of these give city names that are only situated along the coast or inland of the northern Levant or northern Syria (Redford 1992:158-160). The second, third and fourth campaigns are not very well preserved on the walls of Karnak. The list of collected tribute is clear though. This leads Redford to describe these 'campaigns' as tours of inspection by saying 'the Egyptian army mounted a tour of inspection for three successive years during which it collected tribute and reaffirmed the royal claim to the new territory' (Redford 1992:158). Since the fifth campaign describes Thutmose III in the far north in the land of Djahi conquering Ullasa (modern day Tripoli), the idea of the Jezreel and Jordan Valley resting securely in the Egyptian fold is further reinforced as military strategy would require a secure rear flank for Thutmose III's supply lines. These 'tours of inspection' appear to have pacified Canaan (including the Jordan Valley) for the rest of Thutmose III's reign. But Canaanite co-operation lasted only to the end of his life. In his final days, Thutmose

III sent his son to the northern Levant to put down a rebellion around Ugarit and Qatna.

In the 14th campaign during Thutmose III's 39th year, there was some unrest with the Shasu in the Negeb. From the tomb inscription of a soldier who served under Thutmose III, named Amenemheb, the record reads: 'the miserable enemy of the Shasu. I took spoil in the land of the Negev having carried off three Semites as prisoners' (Rainey & Notley 2006:86 translating Sethe 1930:890, 14-15).

Although the Negeb is quite distinct and separate from the Jordan Valley, the Negeb Shasu demonstrated that some population elements in the southern Levant felt they could go against Egyptian interests. However, the pastoral Shasu, being semi-nomadic, would not be risking their lands and towns in rebelling against Egypt as did the urban populations of the Jordan Valley.

The 17th campaign of Thutmose III focuses on controlling the key passes along the valley of Nahr el-Kebir which gives access to Central Syria from the coastal trunk routes (ANET 1955:241). This is significant to this study for it shows the Egyptian military's sensitivity to the geographical choke points of the land. These same military commanders would have been aware of the strategic routes from the eastern plateau and Syrian Plains into the Jordan Valley and would have assuredly secured them as to protect their flanks as they moved north-south along the main trunk route in the Jezreel Valley.

The Annals of Thutmose III also attest to the broad commercial network of world trade that is seen in the archaeological record. Thutmose III records tribute from Punt, Cush, Retenu, Cyprus, Alalakh and Hatti (ANET 1955:234-241). The cities of the Jordan Valley would have benefitted with at least some access to these goods from this international network, especially in their proximity to the main coastal trunk route via the Jezreel Valley or up the eastern slopes to the interior north-south route later named 'the King's Highway.'

3.2.1.5 Amen-hotep II (1425-1400): Late Bronze Age I

While Amen-hotep II underwent several campaigns in the northern Levant, there are only two episodes that hint that the southern Levant, including the Jezreel Valley, could not be taken for granted as loyal to Egypt.

On his way back to Egypt from his first campaign as sole ruler of Egypt, Amenhotep II captured a messenger from Nahrina. The Annals record that

on the Third month of the summer, 6th day. Behold his majesty was going south into the Valley of Sirion. It was with a letter of clay at his neck that he found a courier from the ruler of Nahrina (ANET 1955:246, line 14).

The location of the Valley of Sirion is not known. Traditionally, the Valley of Sirion has been assumed to be on or around the Sharon Plain in the southern Levant, but Rainey and Singer believe it was near Sirion (Rainey & Notley 2006:70) which was the Canaanite name for Mount Hermon. Mount Hermon is more likely as Deuteronomy 4:48 places it on the northern boundary of Og in the Transjordan and Ugaritic texts place it in southern Lebanon (ABD 1996: s.v. Sirion). The Mittani message was most likely traveling from the Damascus plateau towards the Bashan and routes that would lead to the Jordan Valley.

Although the content of the Mittani message is not recorded, the message's purpose must have been designed to stir up rebellion against Egypt, along Egypt's supply line to the fighting in the northern Levant (Rainey & Notley 2006:70). Mittani's efforts may have had some effect in the southern Levant because Pharaoh took action and made a show of military force to the Canaanite cities on the Plain of Sharon and in the Jezreel Valley:

Regal year 9, 3rd month of the First Season, on the 25th day – the departure of his majesty for Retenu on his second victorious campaign. The arrival of his majesty, at the town of Aphek; it came forth in peace in the face of the mighty forces of Pharaoh, blessed be he. The departure of his majesty mounted on his team adorned with the weapons of war to the town of Yahma. Now his majesty had plundered the villages of Mapasin along with the villages of Khatasin, two towns west of Socoh (Rainey & Notley 2006:70, translating Helck (1955-58:1305-1306 lines 17-2).

The capture of the Mittani courier and subsequent Egyptian military action shows that the Canaanite cities in the Jezreel Valley were not totally submissive to Egyptian

rule. The Jezreel Valley cities with their strategic nature along the coastal highway would attract much more attention from Mittani than the cities in the Jordan Valley. However, this event does lend credence to the suggestion that the cities of the Northern Jordan Valley were not necessarily anchored in the Egyptian camp. Both the Karnak and Memphis stelae describe the campaign as continuing into the Jezreel Valley where Pharaoh Amen-hotep II took 'much plunder, including teams of horses, 54 chariots with all their battle equipment and all the adults of Retenu, their children, wives and all their possessions' (Rainey & Notley 2006:71 translating Helck 1955-58:1307 4-9).

Amen-hotep II then attacked and plundered Anaharath:

Early on the following day – the departure of his majesty, mounted, at first light of dawn, equipped with the panoply of Montu on the day of his majesty's coronation. He plundered the city of Anaharath. List of the booty of his majesty: living maryanu – 17; children of princes – 6; living Asiatics – 68; hands – 123; teams of horses – 7; chariots of silver and gold – 7; in addition to all their weapons of warfare; bulls – 443; cows – 370; and all cattle without limit (ANET 1955:247).

Anaharath is identified with Tell Rekehsh/Mukkarkhash located in the eastern Lower Galilee in the valley leading from Mount Tabor to the Jordan River. Joshua 19:19 describes the location of Anaharath as midway between the Jordan Valley and Mount Tabor as part of the border between the tribes of Issachar and Naphtali (ABD 1996, s.v. 'Anaharath'). Amen-hotep II then takes his army back into the Jezreel Valley. Anaharath is the farthest point east recorded in this campaign. Although Amen-hotep II did not enter the Jordan Valley, the impact of an Egyptian army plundering and taking hostages immediately on the boundary of the Jordan Valley must have reinforced Egyptian policy to the cities in the northern part of the valley.

The Amada and Elephantine stelae show a total booty from Amen-hotep II's campaign as:

[t]he plunder that his majesty carried off: 127 princes of Retenu; 179 brothers of princes; 3,600 'Apiru; 15,200 Shasu; 36,300 Kharu; 15,070 Nagasutes/Neges; 30,652 of their family members; total: 89,600 people, and their endless property likewise; all their cattle and endless herds; 60 chariots of silver and gold; 1,032 painted chariots of wood; 13,500 weapons for warfare (ANET 1955:247).

Both the Karnak and Memphis stelae describe the social structure of these Canaanite cities in the list of prisoners taken. There is a warrior class called Maryannu. The population is made up of Canaanites, Hurrians and North Syrians (Nughassians). There were also 'Apiru and Shasu serving as mercenaries (ANET 1955:247). The Egyptians continued their administrative policy of taking the sons of local rulers as hostage (Redford 1992:198-213; 2003:255-257; Rainey & Notley 2006:67).

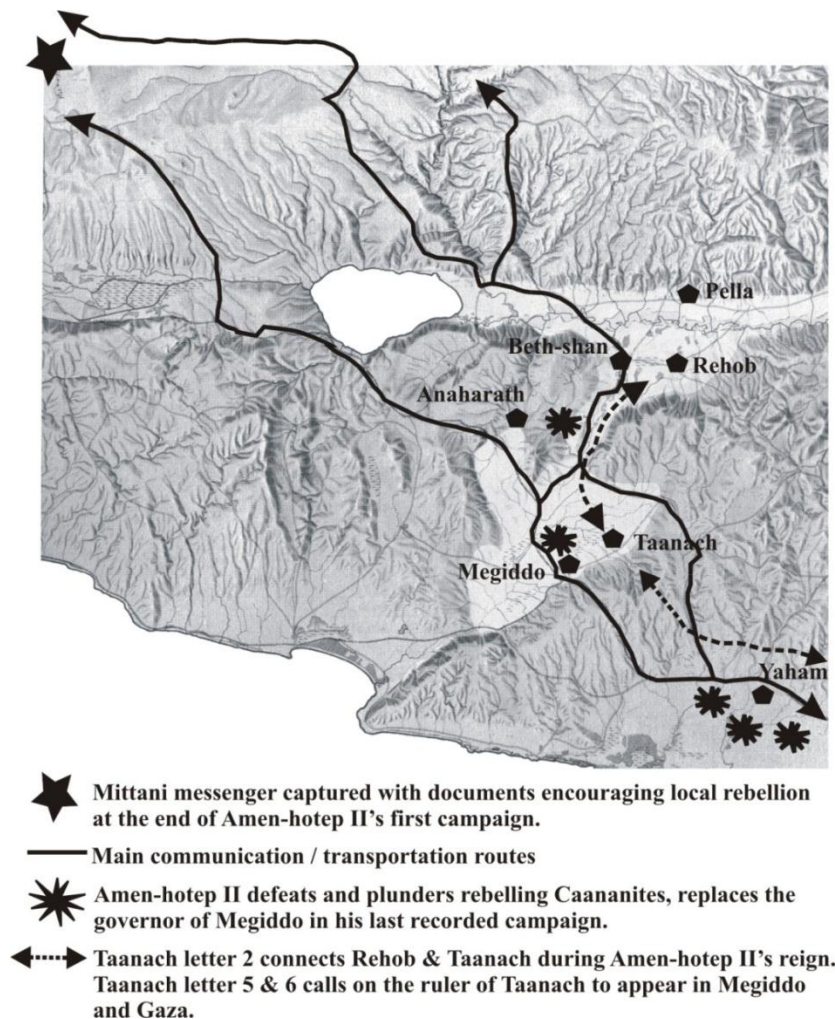


Figure 3.4: Amenhotep II and Taanach Letters
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

3.2.1.6 Papyrus St. Petersburg 1116A (1457-1400): Late Bronze Age I

The content of Papyrus St. Petersburg 1116A has been dated to the reign of Thutmose III or Amen-hotep II. It is a hieratic papyrus listing a number of cities from the Coastal Plains, the Jezreel Valley and Galilee whose ambassadors are qualified to receive food rations while they are in Pharaoh's service (Rainey & Notley 2006:75). Although there is no mention of representatives from the Jordan Valley, several key

cities in the list have been shown to have relations with cities in the Jordan Valley. Megiddo and Taanach both had ambassadors in Egypt. These cities also had relations with Beth-shan, Rehob and Pella as seen in the Tanaach letters and in the alliance against Thutmose IV (Rainey & Notley 2006:76). The presence of ambassadors from the cities of the Jezreel and Galilee with official state sponsorship demonstrates Egypt's formal and ongoing engagement with the Canaanite city states. Undoubtedly, there would be a two-way flow of information, formal or informal, between the city states of the Northern Jordan Valley and the Jezreel Valley and between the diplomatically-connected Canaanite cities with Egypt³⁹ (Rainey & Notley 2006:75).

3.2.1.7 The Taanach Letters (1500-1400): Late Bronze Age I

Taanach, usually identified with Tell Tidnik, located in the Jezreel Valley eight kilometers southeast of Megiddo, was a Canaanite royal town founded ca. 2700 BC. Excavations by Selin (1902-1904) and Lapp (1963, 1966 and 1968) uncovered a number of tablets. The Taanach archives consist of thirteen tablets, four letters (100 readable lines) and nine name lists containing 80 personal names. The exact dates for the tablets are unclear (ABD 1996:288). Although references to an official named Amen-hotep, believed to be an official named after the Pharaoh rather than one of the Amen-hotep Pharaohs themselves, places the tablets in the last quarter of the 15th century BC (Rainey 1973:73).

Of the four letters, one is of special interest to this study as it comes from a regional official located at a place called Raabu. Rainey identifies this place with the site of Rehob in the Beth-shan Valley (Rainey & Notley 2006:76). The letter says:

To Talwisar speak! Thus [spoke] Ahiyami: May Balu the deity preserve your life! You are a brother and beloved friend in that very place.

And you are aware that I have entered into an empty house so give me an 'inch,' viz. two chariot wheels and a bow and two uppasyanima. And if the bow is finished being made then send it in the charge of Purdaya.

³⁹ Rainey's class lecture Jerusalem University College, September, 2001.

Furthermore, command your towns that they carry out their work. Everything that is produced in the towns is my responsibility. Now behold me that I will do good to you.

Furthermore, if there are arrows, then let them be given. Furthermore, may Ilu-rapi enter into Rahabu and I will verily send my man to you and I will verily make a marriage [agreement] (Tanaach letter two translated by Rainey & Notley 2006:76).

If Rainey's identification of Rahabu with Rehob is correct, this is direct evidence for the expected relations between cities in the Jezreel and Jordan Valleys. The letter gives insight into the administrative structure of the Egyptians. The new official apparently took over a position with little military furnishings. Writing to the ruler of Taanach, Ahiyami, located at Rehob, apparently had jurisdiction over the towns in the Jezreel Valley for cultivating the fields and sending the required tribute to Egypt. The local population was committed to performing labor for their Egyptian overlords (Albright 1944:22, Redford 1992:198-211, Na'aman 2005:234-235). The letter also paints a picture of central Canaanite towns acting as centers to smaller satellite villages and farmlands.

Two other letters were written by an Egyptian official named Amenhotep. Traditionally, scholars such as Rainey and Malamat identified this official as Pharaoh Amen-hotep II who ordered the ruler of Taanach to appear before him with his chariots and guard at Gaza and Megiddo. Currently, Rainey holds the position that the Amenhotep who sent these letters was an Egyptian official named after the Pharaoh (Rainey & Notley 2006:76). This Amenhotep was going out to war and required the ruler of Taanach to send tribute, war material and men as well as present himself to the Egyptian official. We can assume similar obligations fell upon the other Canaanite cities of the region. The main currency of exchange appears to be silver rather than 'in-kind' gifts.

It is not clear what function the nine tablets containing the name lists served. Mazar suggested that it was a list of taxpayers or soldiers (in Maisler 1937: 48). The name lists found at Taanach give a diverse mix of ethnic names. The ethnic diversity of the various names reflect a population with origins from across the region. An analysis of the name lists show 62 percent were NW Semitic, 20 percent Indo-Aryan, and 18

percent Hurrian-Anatolian (ABD 1996:288). The individuals with Hurrian names appear to be members of the ruling elite or military officials. These individuals with their roots in the northern Levant made a transfer into the Canaanite cities of the south during the early Late Bronze Age. A migration of northern elite and privileged individuals occurred into the southern Levant sometime in the 16th century BC. No known cause or trace of this action is given (Rainey & Notley 2006:75-76).

The Taanach letters are written in a cuneiform very similar to the Old Babylonian dialect used in the late Middle Bronze Age. The Akkadian texts have no Hurrian influence in the grammar (Rainey & Notley 2006:75).⁴⁰

3.2.1.8 Thutmose IV (1400-1390), Amenhotep III (1390-1352) and Amenhotep IV/Akhenaten (1352-1336): Late Bronze Age II

Thutmose IV had a short reign of nine years. There are no known inscriptions dealing with the southern Levant and the Jordan Valley during his reign. Amarna letter EA 29:16-18 translated by Moran (1992) reveals that a marriage took place between Thutmose IV and a daughter of Artatama I, king of Mittani. This political alliance between Egypt and Mittani helps to explain the seeming lack of attention to the southern Levant during the next few Pharaohs' reign in the period known as the Amarna Age. With the northern borders at peace, Egypt could focus her attention elsewhere and leave the Canaanite cities to themselves. Although this period is often referred to as Egypt's 'Golden Age,' the Pharaohs' internal focus on social, economic and religious developments allowed a breakdown of political stability and unity in southern Canaan.

3.2.1.9 Amarna Age (1390-1336): Late Bronze Age II

3.2.1.9.1 The Amarna Letters introduction

The Amarna letters consists of 350 cuneiform tablets. These documents primarily come from an archive found at Tell el-Amarna, Egypt in the 1880s. Tell el-Amarna was the site of Akhetaten, the capital of Egypt, founded by Amenhotep IV in 1350

⁴⁰ Section 3.2.1.9.10 of this thesis summarises basic issues of both the language of the Taanach and Amarna letters.

BC. In 1334 BC, Pharaoh Tutankhamen moved the royal court back to Thebes. The tablets were found by local inhabitants and purchased by interested buyers. The documents are letters between the Egyptian court and rulers in the Levant. All but seven of the tablets are communications to Pharaoh. None of the seven communiqués of Pharaoh to Levant cities involve the Jordan Valley or neighboring regions. The letters span only thirty years at most, between the 32nd year of Amenhotep III and the 4th year of Tutankhamen when the capital of Akhetaten was moved back to Thebes (Morris 2006:179).⁴¹ The dating of individual Amarna letters of southern Canaan is difficult because no specific references to any particular king are used (see Campbell 1964: 90-105 who tries to correlate the south and north letters to Amenhotep III and the beginning of the reign of Amenhotep IV).

The letters from the southern Levant present a general scene of competing city-states in shifting alliances, attacking and counter attacking one another, each declaring their loyalty to Pharaoh, asking for Egyptian military support to defeat their neighbors so they can resume sending their tribute to Egypt (EA 244). An exception to these local squabbles is a group of letters regarding preparations of support for Egyptian forces that would be campaigning in the north (EA 201-206 and 337).

3.2.1.9.2 Regional background of the period

Thutmose IV handed over a peaceful and prosperous Egyptian Kingdom to Amenhotep III at the beginning of the 14th century BC Egypt was at peace with Mittani. Mittani was under pressure from the Hittites early in the 14th century and courting Egypt with offers of marriage of the King's daughters (EA 19-25). Egypt could focus on internal development and international trade and diplomacy with Babylon, Mittani and across the Mediterranean with Cyprus, Crete, Mycenae and Anatolia (Rainey & Notley 2006:77-78).

Amenhotep IV changed his name to Akhenaten. Akhenaten appears to have initiated both a religious and social revolution. In the religious realm, he elevated Aten, the

⁴¹ For background on the Amarna archive see W.L. Moran, *The Amarna Letters* (Baltimore, Maryland, 1992). Individual documents are cited as EA = El Amarna and the number of the document. In this thesis Moran's 1992 translations (electronic version) were used.

sun disk, to chief deity. Socially, he appears to have moved against the powerful religious class in favor of the military. All Akhenaton's senior ministers seem to have had military rank. All this internal domestic turmoil with no perceived Mittani threat to the north appears to have led to a withdrawal of Egyptian forces and of active engagement in the southern Levant⁴² and also possibly from Megiddo (EA 244). Amenhotep III and IV seemed to have had their focus on internal issues, developing their art and hunting skills over managing the empire. Egypt's lack of administrative attention to the Levant gave opportunity for local rulers to become engaged in quarrels and feuds with their neighbors because some openly opposed Egypt while others paid only superficial homage (Tubb 1998:78).

3.2.1.9.3 Amarna Letters relating to the Jordan Valley

A number of the Amarna letters involve cities, events or individuals connected to the Jordan Valley, although only Beth-shan and Pehel (Pella) (EA 289 & 256) are mentioned by name. Below is a table of Amarna letters that involve the Jordan Valley. This table is built using both the content of the texts and the petrographic analysis of the clay tablets. The petrographic clay analysis of Goren, Finkelstein and Na'aman on individual tablets has allowed identification of fairly specific locations of the origin of the clay of individual tablets (Goren, Finkelstein & Na'aman 2004:4-22). The underlying assumption is that the tablets were written and sent from an area close to their clay source. Hypotheses of scribes reusing clay from other letters or traveling scribes carrying their own clay from other destinations has been discounted by the ease of making new tablets from raw material over remaking old tablets and patterns and groupings of specific scribes and tablets over the larger corpus of Amarna collection (Goren et al 2004:236-237).

⁴² Rainy class lecture Jerusalem University College, October, 2001

Table 3.2: Tablets made from clay originating in the Jordan Valley

EA	Origin of Clay	From person	From city
224	Jordan Valley between Beth-shan and Wadi Zarqa (Goren et al 2004:236)	? Shamhuna	Unspecified. The clay origin suggests possibilities of Beth-shan, Tell Rehob and Pella (Goren et al 2004:236)
232	Beth-shan Valley (Goren et al 2004:239)	Surata ruler of Akka. Akka is identified with Acco on the coast (Goren et al 2004:237).	Unspecified. Goren suggests the tablet was sent from the administrative center at Beth-shan while during a visit by Surata or his scribe and argues against clay from the Jordan Valley being (re)used in Akka (Goren et al 2004:236-237, 239)
234	Beth-shan Valley (Goren et al 2004:238)	Shatatna ruler of Akka. Akka is identified with Acco on the coast (Goren et al 2004:237).	Unspecified. Goren suggests the tablet was sent from the administrative center at Beth-shan while during a visit by Shatatna or his scribe and argues against clay from the Jordan Valley being (re)used in Akka (Goren et al 2004:236-237, 239)
235	Beth-shan Valley (Goren et al 2004:238-239)	Shatatna ruler of Akka. Akka is identified with Acco on the coast (Goren et al 2004:237).	Unspecified. Goren suggests the tablet was sent from the administrative center at Beth-shan while during a visit by Shatatna or his scribe and argues against clay from the Jordan Valley being (re)used in Akka (Goren et al 2004:236-237, 239)
249	Central Jordan Valley between Beth-shan and Wadi Zarqa (Goren et al 2004:248-249)	Ba'lu-UR.SAG	Unspecified. Rainey identifies Ba'lu-UR.SAG with the ruler Ba'lu-mehir of EA 257-259 who came from the coastal plain, Goren presents a strong case for Rehob (Tell es-Sarem) from both the clay composition and textual context of EA 250 (Goren et al 2004: 248-249)

250	Central Jordan Valley between Beth-shan and Wadi Zarqa (Goren et al 2004:248-249)	Ba'lu-UR.SAG	Unspecified. Goren suggests Rehob (Tell es-Sarem) from both the clay composition and textual context (Goren et al 2004: 248-249)
255	Central Jordan Valley/ Beth-shan area (Goren et al 2004:261)	Mut-Ba'lu ruler of Pihilu	Unspecified. Mut-ba'lu is the ruler of Pihilu but the clay comes from the Beth-shan area 5km+ distance from Pihilu as opposed to the clay of EA 256. The letter could have been sent from Pihilu or Beth-shan (Goren et al 2004:261)
256	Wadi Yabis area between Pella and Tell Abu al-Kharaz (Goren et al 2004:260-261)	Mut-Ba'lu ruler of Pihilu	Unspecified. The textual context suggests Pihilu (Pella at Tabqat Fahil) (Goren et al 2004:260-261)
263	Jordan Valley between Beth-shan and Wadi Zarqa (Goren et al 2004:250)	Unclear. Goren suggests Ba'lu-UR.SAG (Goren et al 2004:250)	Unspecified. The letter accuses Tagi and Lab'ayu of attacking the city in the rulers' absence. These rulers of Shechem and Geni-kirmil were enemies of B'lu-UR.SAG, the ruler of Rehob. Location and politics make Rehob a good possibility
285	Central Jordan Valley/ Beth-shan area (Goren et al 2004:268)	Abdi-Heba ruler of Jerusalem	Unspecified. Beth-shan is a likely candidate as the clay analysis is identical to EA 224. Refer to EA 291 from Jerusalem with clay tablet originating from Gezer. Other letters from Jerusalem series – tablets originate from Jerusalem area (Goren et al 2004:268)

Table 3.3: Tablets made from clay originating in the Bashan and Hauron regions between Jebel ed-Druz and Der'a (Goren et al 2004:215-225). These locations suggest passage through the valley in connecting with Egypt

EA	Origin of Clay	From person	From city
200	Southern Bashan or Yarmuk Valley (Goren et al 2004:221)	(?)	Unspecified

201	Southern Bashan or Yarmuk Valley (Goren et al 2004:216)	Artamanya	Z/Siribahani (located in the region of Naveh–Ahituv 1984:181 or ‘Ezra’ in the Hauran (Mazar 1975:187)
202	Southern Bashan or Yarmuk Valley (Goren et al 2004:221)	Amawashe	Unspecified
203	Southern Bashan or Yarmuk Valley (Goren et al 2004:216-217)	Abdi-Milki	Shashimi (no site candidate identified)
204	Southern Bashan or Yarmuk Valley (Goren et al 2004:217)	the ruler of Qanu	Qanu (commonly identified with Qanawat, below Jebel ed-Druz) (Goren et al 2004:215)
205	Southern Bashan or Yarmuk Valley (Goren et al 2004:217-218)	the ruler of Tubu	Tubu – identified as et-Tayibeh between Busra esh-Sham and Der’a (Ahituv 1984:190-191)
206	Southern Bashan or Yarmuk Valley (Goren et al 2004:215)	(?)	Nasiba – identified with Nasib in Der’a by Mazar (1975:187)
207	Bashan region (Goren et al 2004:221-222)	lpte...	Unspecified
208	Damascus area (Goren et al 2004:222)	(?)	?
209	Damascus area (Goren et al 2004:222)	Zishamimi	?
210	Damascus area (Goren et al 2004:222)	Zishamimi	?
241	Southern Bashan or Yarmuk Valley (Goren et al 2004:220)	Rusmanya	Sharuna
334	Nearly identical to EA 364 of the region of Tell ‘Ashtara north of Yarmuk River (Goren et al 2004:219)	(?) of Zuhra	Zuhra
336	Nearly identical to EA 364 of the region of Tell ‘Ashtara north of Yarmuk River (Goren et al 2004:220)	Hiziru	Zuhra
337	Region of Tell ‘Ashtara north of Yarmuk River (Goren et al 2004:219)	Hiziru	Unspecified. Goren suggests a location on the Gilead plateau (Goren et al

			2004:223-224)
364	Region of Tell 'Ashtara north of Yarmuk River (Goren et al 2004:218)	Ayyab	Ashtartu identified with Tell 'Ashtara north of the Yarmuk River (Abou Assaf 1968:103-122) (Biblical Ashtaroth)

Table 3.4: Tablets made from clay originating in the eastern Galilee or southern slopes of the Golan region

EA	Origin of Clay	From person	From city
237	Eastern Galilee or southern slopes of Golan. The eastern Galilee is more likely as the clay analysis of EA 237-239 is identical (Goren et al 2004:240-242) and the textual context of EA 239 involves the Lab'ayu affair which was centered around northern Samaria and the Jezreel Valley	Bayadi	Unspecified. Goren suggests Tell Rekhes, identified with Biblical Anaharath (Aharoni 1967:212-215) as opposed to the other two Late Bronze Age sites (Tell Kinrot – Chinnereth and Tell Qarnei Hittin) located by the matching clay composition of the eastern Galilee (Goren et al 2004:241-243)
238	Eastern Galilee or southern slopes of Golan. The eastern Galilee is more likely as the clay analysis of EA 237-239 is identical (Goren et al 2004:240-242) and the textual context of EA 239 involves the Lab'ayu affair which was centered around northern Samaria and the Jezreel Valley	Bayadi	Unspecified. Goren suggests Tell Rekhes, identified with Biblical Anaharath (Aharoni 1967:430) as opposed to the other two Late Bronze Age sites (Tell Kinrot – Chinnereth and Tell Qarnei Hittin) located by the matching clay composition of the eastern Galilee (Goren et al 2004:241-243)
239	Eastern Galilee or southern slopes of Golan. The eastern Galilee is more likely as the textual context involves the Lab'ayu affair which was centered around northern Samaria and the Jezreel Valley (Goren et al 2004:241)	Baduzana	Unspecified. Goren suggests Tell Rekhes, identified with Biblical Anaharath (Aharoni 1967:430) as opposed to the other two Late Bronze Age sites (Tell Kinrot – Chinnereth and Tell Qarnei Hittin) located by the matching clay composition of the eastern Galilee (Goren et al 2004:241-243)
252	Central hill country of Samaria in the immediate vicinity of Tell Balat,	Lab'ayu	Shechem (Goren et al

	ancient Shechem (Goren et al 2004:263-263)		2004:263-263)
253	Central hill country of Samaria in the immediate vicinity of Tell Balat, ancient Shechem (Goren et al 2004:264)	Lab'ayu	Shechem (Goren et al 2004:264)
254	Central hill country of Samaria in the immediate vicinity of Tell Balat, ancient Shechem (Goren et al 2004:264)	Lab'ayu	Shechem (Goren et al 2004:264)

Table 3.5: Tablets originating from the central highlands west of the Jordan Valley

EA	Origin of Clay	From	City
274	Untested	Queen IN-UR.MAH.MS	Unknown. Suggested candidates are all in the territory surrounding Gezer or the Shephelah (Vita 2000:70-77)
289	Central Hill country, Jerusalem area (Goren et al 2004: 267)	'Abdi-Heba ruler of Jerusalem	Jerusalem

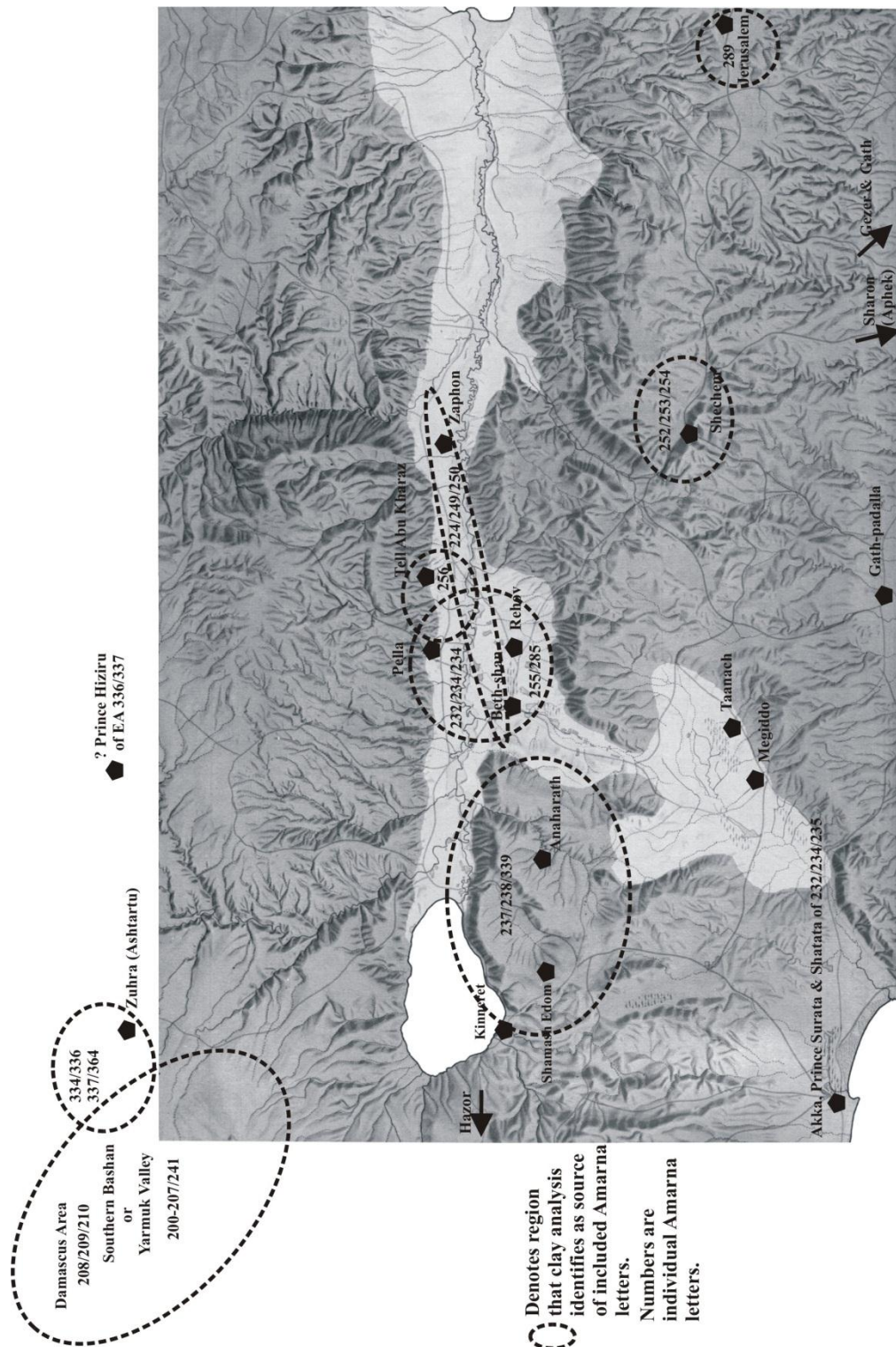


Figure 3.5: Amarna letters located according to origin of clay composition (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011)

3.2.1.9.4 Tablets originating in the Jordan Valley

EA 232, 234, 235 and 285 make up a unique group of letters from two cities. They are unique in that they were written on clay originating in the Jordan Valley near Beth-shan. EA 232, 234 and 235 are written by the ruler of Akka, modern day Acco,

on the coastal plain along the northern bank of the Na'aman River. Akka was a harbor city. EA 285 is from Abdi-Heba, ruler of Jerusalem. Each set of letters fits into a series of other letters originating from the ruler's own city. Neither group from Akka or Jerusalem makes textual reference to issues in the Jordan Valley. The letters from Akka demonstrate that Beth-shan was both an Egyptian administrative and garrison center for a region stretching as far west as Akka and relating to issues as far east as the route up to Damascus. Trade from the coastal highway and distant Mediterranean ports arriving at Akka's harbor would be a short established communication route into the Jordan Valley. In EA 234, Shatatna, the ruler of Akka, defends himself for holding a certain individual who had defected from the service of Biryawaza of Damascus in Akka. The most direct route the deserter from Damascus would have taken to the area of Akka would have been through Bashan, into the Jordan Valley and through the Jezreel.

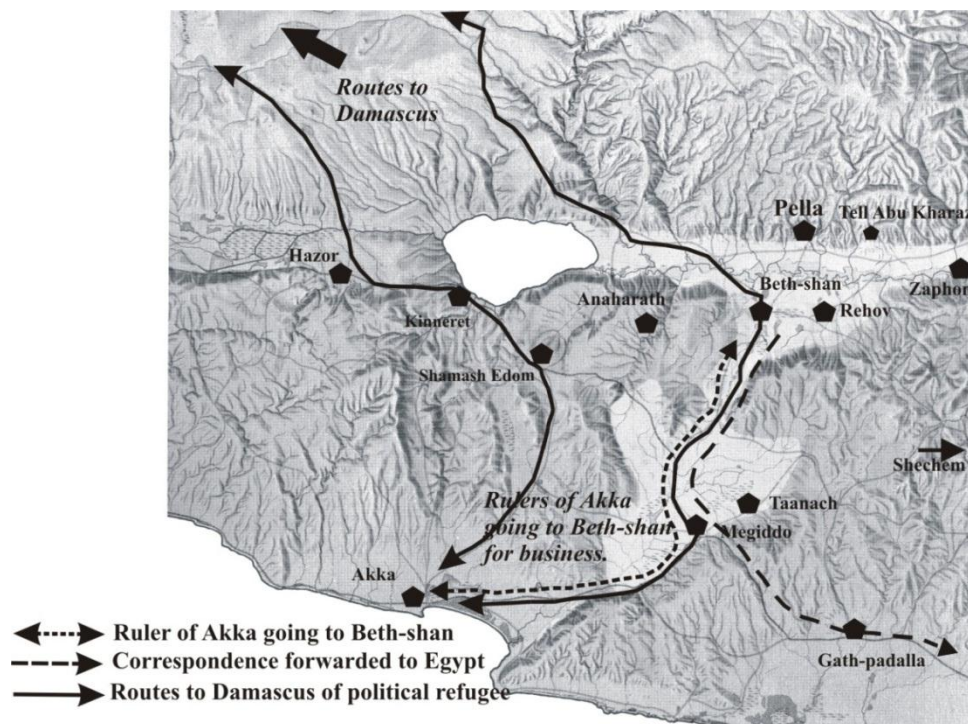


Figure 3.6: Akka and Beth-shan connections in EA 232, 234 and 235

EA 232, 234 and 235 demonstrate the coastal plain connection with the Jordan Valley as the ruler of Akka performs Egyptian administration duties at Beth-shan. EA 234 demonstrates that the Egyptian administration based in Beth-shan dealt with matters ranging from the coastal plain up to Damascus (through the eastern highlands) as Shatatna, ruler of Akka, gives account for harboring a political fugitive from Damascus. The Mediterranean Sea trade would easily have traveled the same routes from Akka to Beth-shan and points eastward on this same route (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

The letter from Jerusalem, EA 285, is one of seven letters written by the ruler Abdi-Heba (EA 285-291). Five of the letters are written on tablets originating in the Jerusalem area, the other is written from Gezer (EA 291) (Goren et al 2004:269). EA 285 contains a complaint that an Egyptian official in Jerusalem had taken over his house and settled an Egyptian garrison in it. If Beth-shan was the closest Egyptian administrative center over the local Jerusalem Egyptians, it is easy to imagine Abdi-Heba going to Beth-shan to plead his case and then sending off his request to Pharaoh from Beth-shan. Communication links between the Judean highlands into the Jordan Valley and Beth-shan were functioning at this time. Beth-shan's administrative authority could have reached as far as Jerusalem. The other Jerusalem letters, EA 286-290, make references to 'Apiru taking over lands in the highlands.

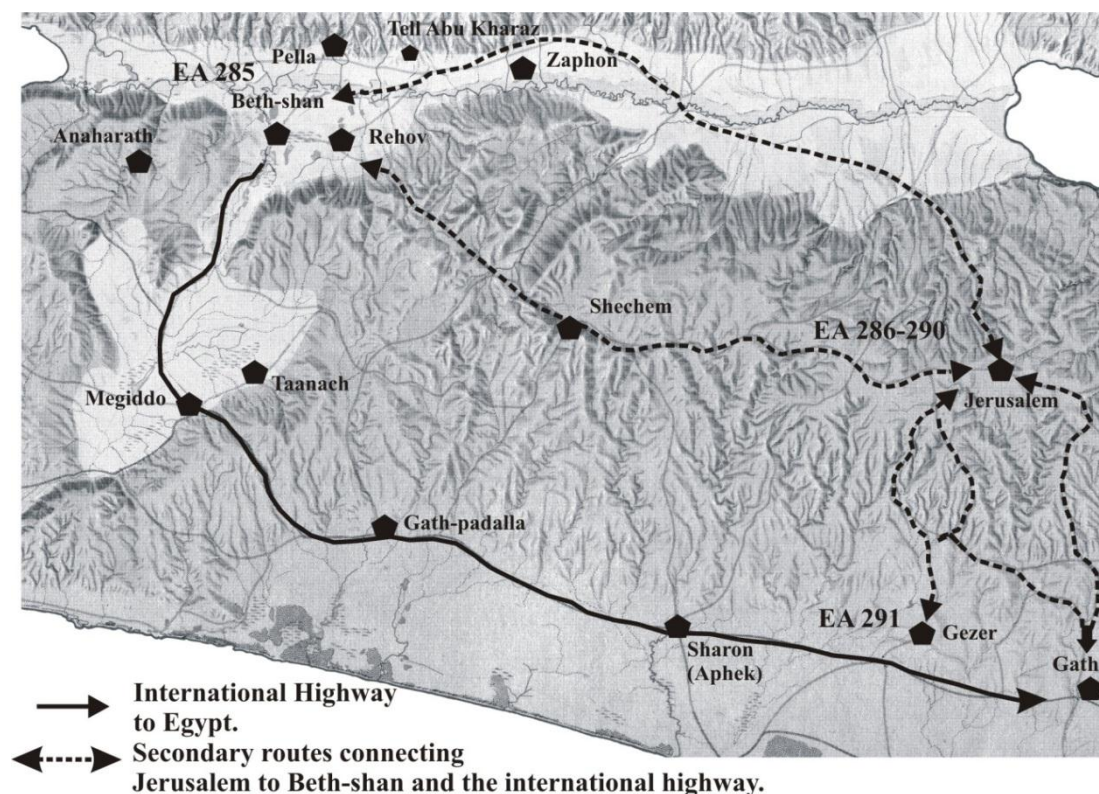


Figure 3.7: Jerusalem and Beth-shan connection in EA 285

Of the seven Jerusalem letters, five were written in Jerusalem, one from Gezer and one from Beth-shan. The collection demonstrates that the Jordan Valley was integrated with the western highlands via secondary routes that continued to the coastal plain. The Jerusalem letter (EA 285) written and sent from Beth-shan complains about the Egyptian garrison in Jerusalem. Beth-shan's Egyptian administration responsibilities ranged down the Jordan Valley and through the western highlands at least as far as Jerusalem (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

EA 224 is not identified with any particular city-state. The clay of the tablet comes from the Central Jordan Valley between Beth-shan and Wadi Zarqa. This location encompassed Beth-shan, Tell Rehob and Pella (Goren et al 2004:236). If Shamhuna, the ruler sending EA 224, was from a more distant city, Beth-shan was the best candidate for its origination as it was the Egyptian administrative center and the most likely candidate for a ruler to visit and from which to conduct foreign affairs. The subject of the letter is the ruler telling Pharaoh that the grain shipment he was supposed to send to Egypt was destroyed (EA 224:7-13). The letter supports the regional picture of grain producing city-states paying tribute to Egypt (EA 244) and individual rulers challenging Egypt for greater independence as seen by Shamhuna questioning the historical precedent of sending grain to Egypt, 'May the king, my lord, ask his commissioners whether our ancestors, since the days of Kusuna, our ancestor, always shipped (grain)' (EA 224:7 translated by Moran [1992]).

EA 249 and 250 are both written by the ruler Ba'lu-UR.SAG. The city that Ba'lu-UR.SAG ruled over is not mentioned. The clay of the tablets originated in the Central Jordan Valley between Beth-shan and Rehob (Tell es-Sarem) which are five kilometers apart (Goren et al 2004:248-250). The possibility that Ba'lu-UR.SAG was visiting the Egyptian administrative center at Beth-shan from afar as did Tagi the ruler of Akka and the ruler of Jerusalem (EA 224, 232, 234 and 235), does exist. However, the context of the two letters deals with issues surrounding the Central Jordan Valley – the expansion of Gezer-Shechem (Milkilu and Lab'ayu) coalition into the Jezreel Valley against Gina (located west of the Kishon River (Na'aman 1988b:184-185), and Ba'lu-UR.SAG's suggestion that Pharaoh order Biryawaza, the ruler of Damascus, to get involved against Milkilu of Pihilu and Lab'ayu (EA 250). The center of these events is the Central Jordan Valley. The context rules out Pihilu. Beth-shan being the Egyptian administrative center would not be ruled by a Canaanite and is therefore also ruled out. The best candidate for Ba'lu-UR.SAG's city is Rehob (Goren et al 2004:249).

Letters 249 and 250 show that the politics of the Central Jordan Valley were tied with those of the Jezreel Valley, coastal plains and central highlands:

[Sa]y [to] the king, [my] lo[rd] Message of Ba·lu-UR.SAG, your servant. I fall at the feet of m[y] lord. As to the king, my lord, may he know that my m[en] are doing service in the day[s] of Mi[lkilu]. What have I done to Milkilu that he should treat my men [even] more unjustly than his own servants? [To Tagi, his father-in-law, he has handed over his own servants!] And what can I myself do? They have been struck down because I am a [lo]yal servant of the king. And so they cannot [ser]ve you. [May] the king [rel] ease me! Where [...] ... Milkilu and Lab·ayu? [...] (EA 249 translated by Moran [1992]).

Say [to] the king, my lord: Message of Ba·lu-UR.SAG, your servant. I fall at the feet of the king, my lord, 7 times and 7 times. May the king, my lord, know [t]hat the two sons of the rebel against the kin[g], my [l]ord, the two sons of Lab·a[y]u, have made their purpose the loss of the land of the kin[g], my lord, over and above the loss that the[ir] father caus[ed]. May the king, my lord, know that—for how many days!—the two sons of Lab·ayu have been calling me to account, [saying], “Why have you handed Gittipadalla [to] the king, your lord, a city that Lab·ayu, our father, had taken?” And the two sons of Lab·ayu keep talking to me like this, [saying], “Wage war against the people of [G]ina for having killed our father. And if you do not wage war, then we will be your enemies.” I have answered the two of them, “May the god of the king, my lord, preserve me from waging war against the pe[op]le of [G]ina, servants of the king, my lord.” May it seem rig[ht] in the sight of the king, my lord, and may he sen[d] one of his magnates to Biryawaza [to tel]l him, “You will ma[r]ch against the two sons of Lab·ayu or [yo]u are a rebel against the king.” After this may the king, my lord, wr[i]te t[o m]e, “D[o] the work of the [kin]g, your [lo]rd, against the two son[s of L]ab·ayu.” [...] in order to cause the loss, with the assistance of the two of them, of the r[es]t of the lan[d] of the k[ing, m]y [l]ord, over and above what Milkilu and Lab·ayu caused to be lost. And thus the two [s]on[s of L]a[b·a]yu keep saying to me, “Wage war against the king, your lord, as our father did, when he attacked šunama, Bur[q]una, and Ḫarabu, and deported the evil ones, li[fti]ng up the loyal. He also seized Gittirimmunima, and he cultivated the fi[el]ds of the king, your lord.” But I have answered the two of them, “May the god of the king, my lord, preserve me from waging war against the king, my lord. It is the king, my lord, I serve, along with my brothers that give heed to me.” The messenger of Milkilu does not move from the two sons of Lab·ayu. Now, Milkilu is indeed trying to cause the loss of the land of the king, my lord, but I have no other purpose: the king, my lord, I serve, and the orders that the king speaks I obey (EA 250 translated by Moran [1992]).

There is also a strong possibility of an alliance between Gezer and Pehilu. The ruler of Jerusalem in EA 289 associates the ruler of Gezer with the sons of Lab·ayu, ‘Milkilu does not break away from the sons of Lab·ayu and from the sons of Arsawa, as they desire the land of the king for themselves’ (EA 289:5-10 translated by Moran [1992]). From EA 255 we know that one of the sons of Lab·ayu was the ruler of Pehilu. It is not clear if Mut-Bahlu of Pehilu (a son of Lab·ayu) (EA 255) is one of the sons of Lab·ayu that ‘Abdi-Heba, king of Jerusalem, associates with Gezer or not. If not, a

familiar awareness/relations would have least existed between Mut-Bahlu and the alliance his other brothers had with Gezer. This paper has already shown the communication patterns which existed between the Jordan Valley, the coastal plain and the western highlands.

Political ties with the Bashan and Damascus were also close enough to be called on for assistance or interference. Ba'lu-UR.SAG, representing Rehob and Pehilu were clearly involved in the Lab'aya and his sons' affair as known through EA 237, 244, 245, 246, 250, 252, 253, 254, 255, 280, 287, and 289. Even Damascus could have been involved as Balu-UR.SAG requested Pharaoh to involve Biryawaza, king of Damascus: 'May it seem rig[ht] in the sight of the king, my lord, and may he sen[d] one of his magnates to Biryawaza [to tel]l him, "You will ma[r]ch against the two sons of Lab'ayu or [yo]u are a rebel against the king."' (EA 250:15-30 translated by Moran [1992]). If these main cities were involved in the regional politics surrounding Lab'aya, certainly the other cities and settlements of the Central Jordan Valley were involved as well.

EA 263's petroanalysis identifies it as originating from the Beth-shan/Rehob area (Goren et al 2004:250). Neither the sender nor the city is mentioned in the surviving text:

[Say to my lord: Me]ssage of [..., your servant].1 I fall at the feet of my lord 7 times and 7 times ... [...]... [A]nd may my lord listen to the wo[r]ds of his servant. When I vi[si]ted the house of my lord, everything was taken from the house of your servant. Silver was taken; men were taken; sheep and goats: šú-ú-nu were taken. The cities of my lord: ḥa-sí-lu (were despoiled),³ and whatever my lord had given to his servant, this too was taken. So may my lord give thought to his servant. I make this speech through Pawura. May my lord send a garrison and horses: sú-ú-[sí-ma]. My lord commanded his servant [...] ... [fr]om Tagi [an]d from Lab'ayu. (EA 263 translated by Moran [1992])

As the letter suggests, Tagi and Lab'ayu were involved in the sacking of this city and that these rulers, in their respective cities of Ginti-kirmil and Schechem, were enemies of Ba'lu-UR.SAG of Rehob. Abdi-Heba of Jerusalem complains in EA 289 that men of Ginti-kirmil make up the garrison of Beth-shan, 'Gintikirmil belongs to Tagi, and men of Gintu are the garrison in Bitsanu' (EA 289:18-20 translated by Moran

[1992]). Goren and Finkelstein suggest the sender was B'lu-UR.SAG from Rehob (Goren et al 2004:250). If EA 263 did not come from Rehob, it at least came from the region surrounding Rehob and shows further evidence of western highlanders descending into the Jordan Valley for political and material gain.

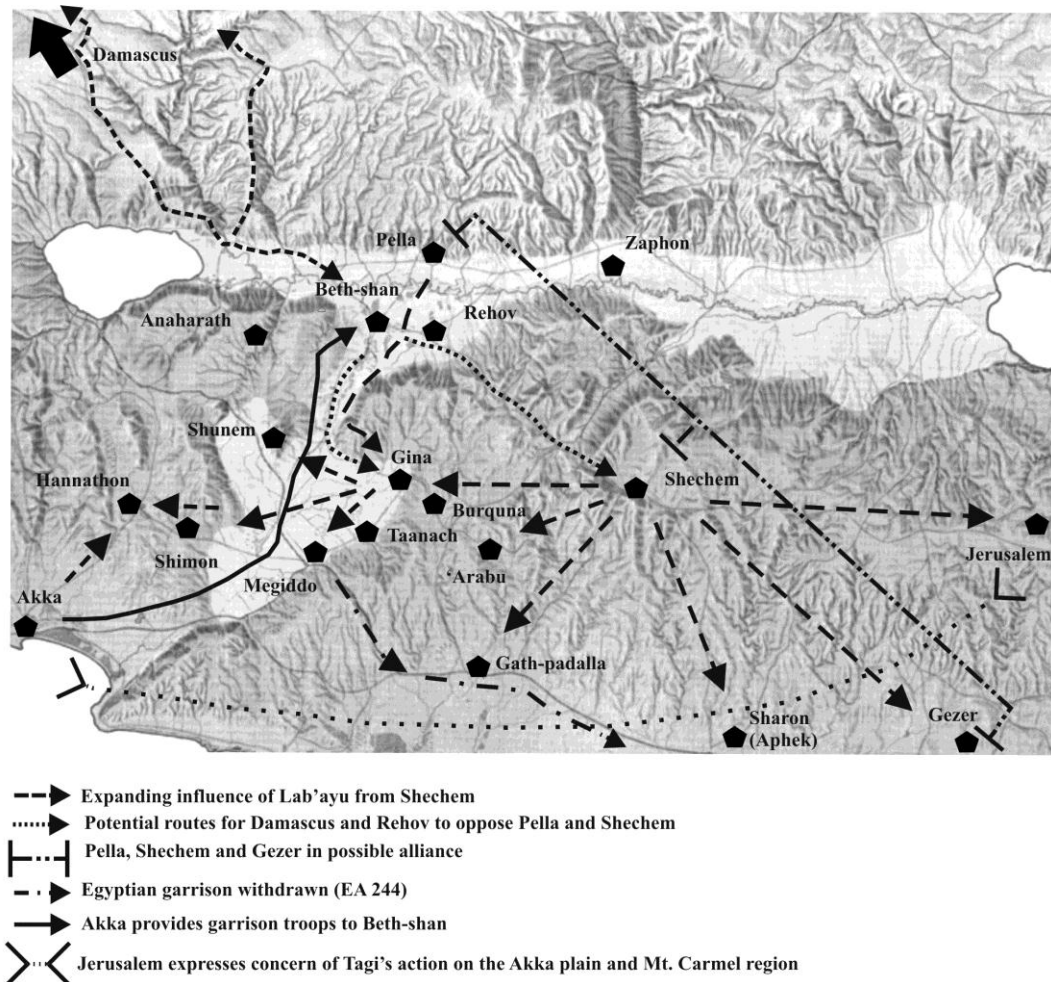


Figure 3.8: The Lab'ayu Affair EA 239-239, 244-246, 249, 250, 252-255, 280, 289

Lab'ayu of Shechem and his son's political expansion recorded in the Amarna letters connects the Jordan Valley with the western highlands, the Lower Galilee and the Coastal Plain as far south as Gezer. The Egyptian garrison at Megiddo was withdrawn leaving a power vacuum that Lab'ayu moves to fill (EA 244). From the Central Jordan Valley (Rehob?) complaints about Milkilu of Pihilu and Lab'ayu from Shechem expanding on Gina and Gath-padalla are sent to Egypt (EA 249-250). EA 250 requests Pharaoh to order Biryawaza of Damascus to get involved against Milkilu and Lab'ayu. EA 289 associates Pihilu and Gezer in a possible alliance as well as with Lab'ayu from EA 250. Pihilu, Rehob and certainly Beth-shan are caught up in the larger regional Lab'ayu affair that includes the Lower Galilee. It is easy to imagine one of these cities in the Jordan Valley having parts of their grain supply destroyed as recorded in EA 224. Akka sends troops to Beth-shan (EA 289) (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

EA 255 and 256 are written by Mut-Ba'lu who identifies himself as the ruler of Pihilu in EA 256:4-10. Pihilu has already been identified with Pella (Tabqat Fahil) on the eastern side of the valley directly across from Beth-shan and Rehob (section 2.3.1.2.1). The clay of EA 255 is distinctly different from that of EA 256. EA 255's clay

comes from basaltic clay located 5 kilometers away along the Jordan River near Beth-shan. Clay from EA 256 comes from the immediate surroundings of Pella (Goren et al 2004:261). To be consistent with the argument of the letter originating close to its clay origin, EA 255 could have been written in Beth-shan or Pihilu. The two locations are only 12 kilometers apart. Mut-Ba'lu was either visiting the Egyptian administration in Beth-shan when he wrote the letter or was in his own territory.

EA 255 is a defense of Mut-Ba'lu detaining or harassing a trade caravan from Egypt to Hanagalbat (Mitanni):

The king, my lord, sent Haaya to me to say, "A caravan to Hanagalbat is this [man] to send on, and [all of you] send it on!" Who am I that I would not send on a caravan of the king, my lord, seeing that [La]b-ayu, my father, [used to ser]ve the king, his lord, [and] he [himself] used to send on [all the carav]ans [that] the king [would se]nd to Hanagalbat. Let the king, my lord, send a caravan even to Karaduniyaš. I will personally conduct it under very heavy guard (EA 255:8-21 translated by Moran [1992]).

Hanagalbat is the Assyrian term for Mitanni (Astour 1972:103). Karaduniyas is identified with Babylon (EA 255:21 translated by Moran [1992]). From the context, Haaya is the Egyptian official who called Mut-Ba'lu to account for his action towards the caravan. Although the borders of individual city-states are not specified or easy to determine, Pehilu's influence must have included the trade route as it left Beth-shan's protection heading across the east side of the valley up towards the Bashan towards Damascus. This letter also shows that Lab'ayu's expansion policy out of Shechem was successful in installing his son as ruler of Pihilu (EA 255:8-11). This letter is also a clear indication of the key east-west trade route connecting the Jordan Valley to both Mitanni and Babylon.

EA 256 is Mut-Ba'lu's defense against charges that he is avoiding Pharaoh's representatives and is hiding the fugitive Ayyab. In his defense, he calls three character witnesses and gives an example of his loyalty by aiding the city of Ashtartu:

How can it have been said in your presence "Mut-Baḥlu has fled. He has hidden Ayyab"? How can the king of Piḥilu flee from the commissioner: *sú-ki-ni* of the king, his lord? As the king, my lord, lives, as the king, my lord, lives, I swear Ayyab is not in Piḥilu. In fact, he *h[as been in the fie]ld* for two months. Just ask Ben-Elima. Just ask Tadua. Just ask Yišuya whether, after *he*

[ro]bbed Šulum-Marduk, I went to the aid of Aštartu, when all the cities of Garu had become hostile: Udumu, Aduru, Araru, Mešta, Magdalu, Ħeni-anabi, Sarqu, Ħayyunu, along with Yabiluma, has been captured (EA 256 translated by Moran [1992]).

Aštartu is identified with Ashtaroth at Tell Ashtara in the Bashan north of the Yarmuk River (Abou Assaf 1968:103-122). The city is located along a key junction on the trade routes connecting Damascus and Beth-shan as well as Damascus and points south.

EA 364 connects Ashtaroth with the Hazor (Hasura) adding to the strategic nature of Pihilu being involved with affairs on the Bashan and Upper Golan. Only a few of the cities of Garu (possible area of Biblical Gesher [Aharoni 1979:143]) have been identified. These cities are: Hayyuna = Ain at Khirbe 'Ayyun 5 kilometers east of the sea of Galilee, Heni-anabi = En-anab of Tell Shihab located in the Yarmuk Valley, 35 kilometers east of the Sea of Galilee, Adura = Aduran of the scribal journey of Papyrus Anastasi I (see 3.2.2.4) (Goren et al 2004: 73, 179, 183) and Yabiluma = Tell 'Abil of the Decapolis (Ahituv 1984:196). These locations set a pattern for both identifying the land of Garu and placing the other cities in areas of the Lower Golan, Lower Gilead and western slopes of Bashan. That the ruler of Pihilu went to the aid of Aštartu demonstrates that this city was involved in the political and economic affairs of the Bashan, the eastern highlands and most likely Hazor.

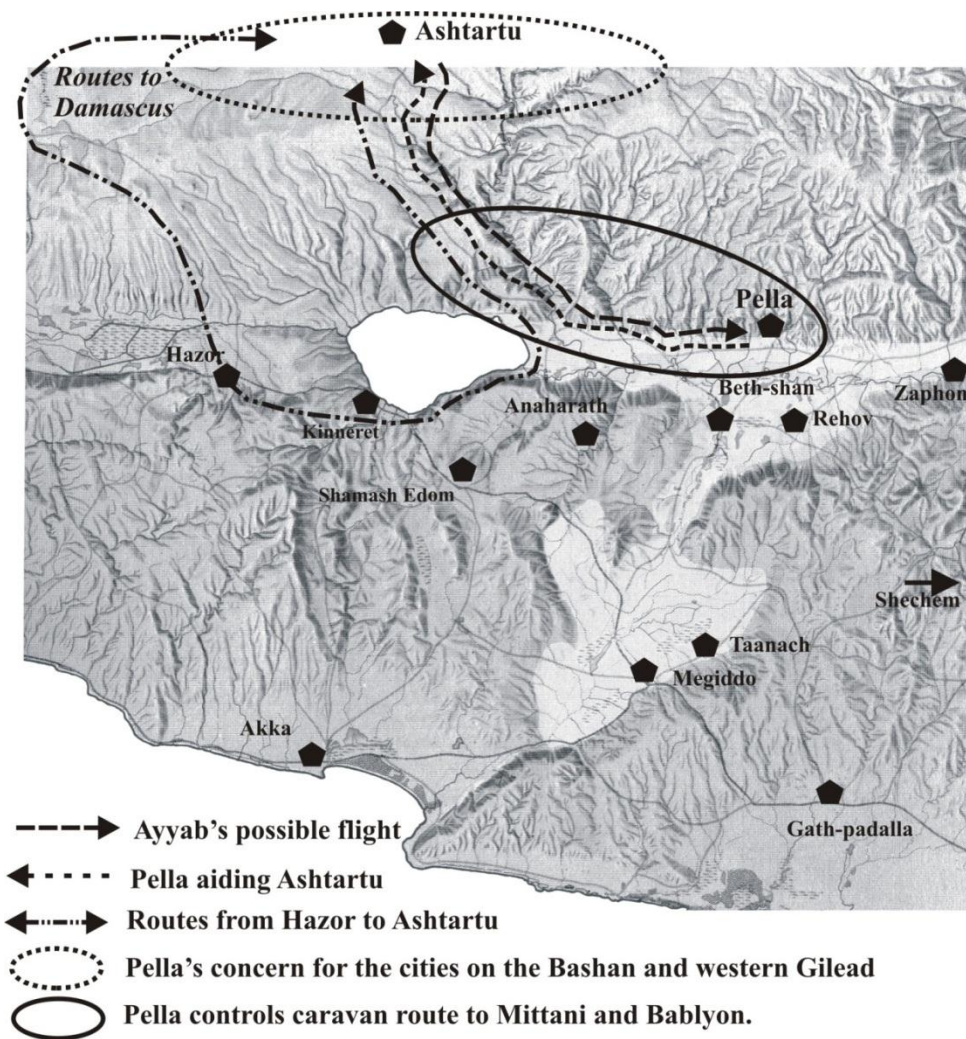


Figure 3.9: Pihilu's connection with the Bashan and the Damascus Plateau in EA 255 and 256
Mut-ba'lu of Pihilu shows concern for the many cities of the Bashan that have been captured by an unnamed force and sent military aid to Ashtartu (EA 256). The unnamed aggressor could be Hazor as EA 364 connects Ashtartu with Hazor. These two letters demonstrates Pihilu's political and economic affairs of the Bashan, the eastern highlands and most likely Hazor. EA 255 also connects Pella with the Damascus Plateau as Pella responds to accusations of stopping caravans coming from Mittani (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.2.1.9.5 Tablets originating east of the Jordan Valley

EA 200-210, 241, 334, 336, 337 and 364 all originate in the Bashan and Damascus area. Each of these letters fall into one of two categories: the letters from Damascus, EA 208-210, EA 241 and 364 assure Egypt that the cities under its responsibility are safe and that these cities will loyally defend them in Pharaoh's name. The one exception is the case of Ayyab of Ashtaroth who has lost three cities to Hazor (EA 364). The remaining letters, EA 200-207, 241, 334, 336 and 337, all refer to preparations for providing support to the Egyptian army in an upcoming campaign:

Say to the king, my lord: Message of Artamanya, the ruler of Siribašani, your servant. I fall at the feet of the king, my lord, 7 times plus 7 times. As you have written me to make preparations before the arrival of the archers, who am I, a mere dog, that I should not go? I am herewith, along with my troops and my chariots, at the disposition of the archers wherever the king, my lord, orders [me to go] (EA 201 translated by Moran [1992]).

Say to the king, my lord, my Sun, my god: Message of Hiziru, your servant. I fall at the feet of the king, my lord, 7 times and 7 times. The king, my lord, wrote to me, "Prepare the supplies before the arrival of a large army of archers of the king, [m]y l[ord]. May the god of the king, my lord, grant that the king, my lord, come forth along with his large army and learn about his lands. I have indeed prepared accordingly abundant supplies: before the arrival of a large army of the king, my lord. The king, my lord, wrote to me, "Guard Maya," the commissioner of the king, my lord. Truly, I guard Maya very carefully (EA 337 translated by Moran [1992]).

It is unclear if this campaign ever took place as there is a lack of any other reference to it. But the natural route of the Egyptian troops would have been past Beth-shan, across the Jordan Valley to reach these cities in the Bashan (see 3.2.1.9). The threat, to which this campaign is responding, is unclear. It is most likely trouble along the northern boundaries with Mittani and rising Hittite influence as campaign preparations show a two pronged movement of Egyptian forces up the Lebanese coast and through Bashan across the Jordan Valley (see 3.2.1.9). Although EA 207 from an unknown city under the authority of the local Egyptian ruler, Kumudi (responsible for southern Syria and whose clay comes from the Bashan) (Goren et al 2004:221-222) declares that he has lost his cities to the 'Apiru:

[S]ay to the king, my lord, [*my Sun*]: Message of Ipte[...], your [servant. I fall a]t the feet of m[y] lord. I have obeyed a[*all the orders of the kin*]g on the [tablet]. Look, I am a [*loyal*] servant [*that*] has served [*the king*]. Wh[o] [*is a loyal*] servant like m[e]? As to your saying, "Wh[y] must the commissioner of the king [sp]eak twice the wor[d of ...] ... Look, [*I ...*] ... like the Sun and like [*Baal*]. In fact, Puhur has not protected me. Lost to the 'Apiru ... from [my] control are all the cities of the king (EA 207 translated by Moran [1992]).

So the Egyptian campaign's focus could also be for quelling local uprisings as well. For the cities of the Bashan to be requested to support an Egyptian army on the march, the cities of the northern Central Jordan Valley would need to be under Egyptian control and expected to assist the Egyptians as well.

3.2.1.9.6 Tablets originating west of the Jordan Valley

Most of the letters originating from areas just west of the Jordan Valley involve the Lab'aya and sons' affair as known through EA 237, 244, 245, 246, 250, 252, 253, 254, 255, 280, 287, and 289 and are mentioned in section c. Amarna Letters Relating to the Jordan Valley, and Illustration 3-8. Lab'aya and his sons were expanding their influence out of Shechem west to the coastal plain to Gezer (EA 253, 254) and Gath-padalla (EA 249, 250), south to Jerusalem (EA 287), north to Megiddo (EA 244) and Shunem in the Jezreel Valley (EA 250). Cities farther north on the coast, Acco, Achsheph and the Lower Galilee were also involved (EA 245).

EA 289 from the 'Abdi-Ḥeba ruler of Jerusalem, mentions the ruler Tagi who controls Gath-carmel and whose territory appears to be centered around Mount Carmel and the Plain of Acco (Rainey & Notley 2006:83) is providing troops to the garrison at Beth-shan, 'Gintikirmil belongs to Tagi, and men of Gintu are the garrison in Bitsanu' (EA 289:18-20 translated by Moran [1992]). Tagi is not only invested in Beth-shan and thus related to the issues of the northern central valley, but he is acutely tied up in the Lab'ayu affair reaching down to both the urban population of Jerusalem and the 'Apiru of the central highlands, 'Are we to act like Lab'ayu when he was giving the land of Šakmu to the Ḥapiru? Milkilu has written to Tagi and the sons of Lab'ayu: "Be the both of you a protection. Grant all their demands to the men of Qiltu, and let us isolate Jerusalem""(EA 289:20-35 translated by Moran [1992]). Tagi and his coastal territory are also linked by a partial clay cylinder found at Beth-shan that contains a portion of a letter from Tagi to Lab'ayu (Horowitz 1996:208-218). These letters as well as EA 250 (see 3.2.1.9.3) show that cities of the northern Central Jordan Valley (Beth-shan, Rehob and Pella) were part of the political web of the Lab'ayu affair. This web of connected cities ranged from the western coast to the south and up into the central highlands. It included a political alliance between Milkilu in Gezer and the sons of Lab'ayu in Pelha as attested by 'Abdi-Kheber of Jerusalem: 'The messenger of Milkilu does not move from the two sons of Lab'ayu' (EA 250 translated by Moran [1992]).

EA 244 from Megiddo states that the Egyptian garrison at Megiddo has been withdrawn back to Egypt, giving Lab'ayu opportunity to move against Megiddo:

Say to the king, my lord and my Sun: Message of Biridiya, the loyal servant of the king. I fall at the feet of the king, my lord and my Sun, 7 times and 7 times. May the king, my lord, know that since the return [to Egypt] of the archers, Lab·ayu has waged war against me. We are thus unable to do the plucking: [*harvesting*] and we are unable to go out of the city gate because of Lab·ayu. When he learned archers were not co[m]ing o[ut], he immediately [de]termined to take Magiddo. May the king save his city lest Lab·ayu seize it. Look, the city is consumed by pestilence, by ... So may the king give a garrison of 100 men to guard his city lest Lab·ayu seize it. Look, Lab·ayu has no other purpose. He seeks simply the seizure of Magiddo (EA 244 translated by Moran [1992]).

Did a possible withdrawal or scaling down of Egyptian forces in Beth-shan also occur?

One can argue that Megiddo, being on the main international coastal highway, was much more strategic than Beth-shan guarding the secondary east-west passage up to the Bashan. Egypt's lessened ability to project its power would necessitate future campaigns to which the sources attest.

EA 274 has not undergone a clay analysis to determine its area of origin. The petrographic analysis of EA 273, sent by the same Queen, shows an origin of Gezer for EA 273. The letter is grouped with twenty-three other letters called by Vita the 'Gezer-Corpus'. The 'Gezer-Corpus' is a collection of twenty-four letters identified as written by the same scribe primarily writing out of Gezer (Vita 2000:70-77). This scribe wrote for the rulers of several cities around Gezer and the Shephelah. The interest of EA 274 for this study is Albright's identification of its mentioned city, Sabuma, with Biblical Zaphon in the Jordan Valley (Albright 1943:7-17):

Say to the king, my lord, my god, my Sun: Message of NIN-UR.MAḤ.MEŠ, your handmaid, the dirt at your feet. I fall at the feet of the king, my lord, 7 times and 7 times. May the king, my lord, save his land from the power of the Apiru lest it be lost. Šapuma has been take(n). For the information of the king, my lord. (EA 274 translated by Moran [1992]).

If Albright was correct in identifying Sabuma with Zaphon, EA 274 shows evidence of another ruler in the western highlands/Shephelah who was not only aware of but also considered activities in the Jordan Valley of vital interest. Albright's

identification of Sabuma with Zaphon is not without objection. Zadok (1986:180) places Sabuma with the modern village of Saffa via Josephus' Saffo or at a nearby site like el-Burj (Horvat Tittora) since no clear Late Bronze Age material has been found at Saffa. Zadok's argument rests on the geopolitical grounds of Sabuma being located near Queen NIN-UR.MAḪ. MEŠ's seat of power and that she also complained of 'Apiru activity in the Shephelah in EA 273. Zadok's argument for Sabuma being located in the Shephelah is not required as EA 289 has already connected Gezer with Pella and the other letters of the Labay'u affair connect the central highlands with both the Jordan Valley and the coastal plain. EA 285 and 291 (see following paragraph) also demonstrate connections between the Jordan Valley and Gezer via Jerusalem. So although Queen NIN-UR.MAḪ. MEŠ's seat of power has not been identified and suggested candidates for her city are all in the territory surrounding Gezer or the nearby Shephelah, it is reasonably to accept that she had interest in the Jordan Valley.

EA 285 (a Jerusalem letter written from Beth-shan) and EA 291 (a Jerusalem letter written from Gezer) reveals a clear connection between the Jordan Valley and Shephelah/Coastal Plain in the vicinity of Gezer. Albright's identity of Sabuma with Zaphon is not easily dismissed on purely geopolitical grounds. Accepting the identification of Sabuma with Zaphon makes EA 274 the only direct reference to 'Apiru activity in the Jordan Valley (see 3.2.3.1).

3.2.1.9.7 Regarding the 'Apiru in the Amarna Letters

None of the Amarna correspondence from the Jordan Valley makes reference to the 'Apiru. The only 'Apiru reference in the Jordan Valley comes from EA 274. Four other letters whose cities or rulers have been connected to the Jordan Valley cities by communication, trade and political networks do mention the 'Apiru in areas surrounding the Jordan Valley. Letter 207 from a ruler whose name begins with Ipte ... from an unspecified city located in the Bashan (Goren et al 2004:221) states: 'Lost to the 'Apiru: ḥa-[...] from [my] control are all the cities of the king' (EA 207 translated by Moran [1992]). The tablet is too damaged to get any further information on the names or number of cities lost to the 'Apiru. There must have

been some concern for the security of the cities of the Bashan for many other letters from the Bashan area, including EA 201-206 and 337, each give assurances to Pharaoh that their city is secure and loyal. Only EA 364 hints of further unrest in the Bashan with a complaint that 'the ruler of Ḥaṣura who has taken 3 cities from me' (EA 364 translated by Moran [1992]). It is unclear if the main threat to the cities on the Bashan is the 'Apiru, other city-states or, more than likely, the expanding powers of the Hittites. Although Hazor is located outside the area of study for this thesis, it is worthwhile to note here that this city, located in the Jordan Valley north of the Sea of Galilee and Rosh Pinna Sill, did project its power into the eastern highlands of the Bashan demonstrating that the routes out of the greater Jordan Valley up to the eastern highlands were not a barrier to military forces.

On the western side of the Jordan Valley letters 254 and 289 make reference to the 'Apiru. EA 289 is 'Abdi-Heba of Jerusalem's accusation of Lab'ayu consorting with the 'Apiru. 'Are we to act like Lab'ayu when he was giving the land of Šakmu to the Ḥapiru?' (EA 289 translated by Moran [1992]). EA 254 is a defense of Lab'ayu to Pharaoh where he states, 'Moreover, the king wrote for my son. I did not know that my son was consorting with the 'Apiru. I herewith hand him over to Addaya' (EA 254 translated by Moran [1992]). Biridiya of Meggido also supports the claim that Lab'ayu's sons are involved with the 'Apiru. 'May the king, my lord, know. The two sons of Lab'ayu have indeed gi[v]en their money to the 'Apiru and to the *Su[teans in ord]er to w[age war again]st me*' (EA 246 translated by Moran [1992]).

In EA 286, 287 and 290, the king of Jerusalem makes further complaints that his land and those towards Gezer in the west, is being taken over by the 'Apiru. Although, no 'Apiru activity is known for the Jordan Valley, 'Apiru are affecting the political entities connected to cities of Beth-shan, Pella and Rehob on both the eastern and western flanks of the valley.

3.2.1.9.8 Regarding Egyptian administration during the Amarna Age

In general, the Amarna letters of the Jordan Valley show a rather 'light hand' policy of Egyptian rule. Unless trade routes were threatened (as in the ruler of Pella in EA 255) or military campaigns needed supporting (EA 201-206 and 337), the cities of the

Jordan Valley were left to live and squabble amongst themselves even though the individual rulers were constantly asking for Pharaoh's support against their neighbors. In the case of Suwardata of EA 280 in the western highlands, Pharaoh appears to have granted permission to wage war: 'The king, my lord, permitted me to wage war against Qeltu. I waged war. It is now at peace with me; my city is restored to me' (EA 280:9-15 translated by Moran [1992]). Pharaoh's archers appear to be held in high esteem and are the one unit requested, as opposed to troops and chariots, to make up the Egyptian army. Archer units of 10, 20 and 50 appear enough to defend a city and deter aggression by neighboring cities (EA 113, 238, 285, 289). Although Egypt held a standing professional army, these small numbers probably acted as a deterrent to aggression, more as an official representation of Pharaoh, than overwhelming power against local forces. In the absence of an Egyptian military presence, the neighboring cities appeared not to be deterred in attacking the local defences or militia. As in the case of Biridiya of Megiddo being attacked by Lab'ayu:

May the king, my lord, know that since the return [to Egypt] of the archers, Lab-ayu has waged war against me. We are thus unable to do the plucking: *Ka-Zi-ra* [*harvesting*], and we are unable to go out of the city gate: *ša-aḥ-ri* because of Lab-ayu. When he learned archers were not co[m]ing o[ut], he immediately [de]termined to take Magidda. May the king save his city lest Lab-ayu seize it. Look, the city is consumed by pestilence, by ... So may the king give a garrison of 100 men to guard his city lest Lab-ayu seize it (EA 244 translated by Moran [1992]).

Pharaoh could make or break any Canaanite city by sending or withholding his military support. Abdi-Heba of Jerusalem expressed his dependence on Pharaoh's support as the 'Apiru gained strength in EA 288:

May the king give thought to his land; the land of the king is lost. All of it has attacked me. I am at war as far as the land of Šeru and as far as Ginti-kirmil. All the mayors are at peace, but I am at war. I am treated like an 'Apiru, and I do not visit the king, my lord, since I am at war. I am situated like a ship in the midst of the sea. The strong hand [arm] of the king took the land of Naḥrima and the land of Kasi, but now the 'Apiru have taken the very cities of the king. Not a single mayor remains to the king, my lord; all are lost. Behold, Turbazu was slain in the city gate of Silu. The king did nothing. Behold, servants who were joined to the 'Api[r]u smote Zimredda of Lakisu, and Yaptiḥ-Hadda was slain in the city gate of Silu. The king did nothing. [Wh]y has he not called them to account? May the king [pro]vide for [his land] and may he [se]e to it tha[t] archers [come ou]t to h[is] land. If there are no archers this year, all the lands of the king, my lord, are lost. They have

not reported to the king that the lands of the king, my lord, are lost and all the mayors lost. If there are no archers this year, may the king send a commissioner to fetch me, me along with my brothers, and then we will die near the king, our lord. [To] the scribe of the king, my lord: [Message] of ·Abdi-Ḥeba, [your] servant. [I fa]ll a[t [your] feet]. Present [the words that I hav]e offered to [the king, my lord]: I am your servant [and] your [s]on (EA 288 translated by Moran [1992]).

Egyptian commissioners were either based out of key cities like Beth-shan where regional leaders came to do administrative business (see 4.2.1.1 & 3.2.1.9.4 discussing EA 232, 234, 235 and 285), or confiscating residences such as in Jerusalem (EA 285). Egyptian commissioners were involved in collecting intelligence (Cohen 2002:85-95). There seemed to be standing orders from Pharaoh to the local rulers to report on the political and economic situation, ‘The king, my lord, wrote to me, “Write to me what you have heard in Canaan”’ and ‘I am your loyal servant, and whatever I hear I write to [my] lord’ (EA 151 and EA 116 translated by Moran [1992]).

Examples of Pharaoh hearing and acting on received intelligence can be seen in the following two letters:

- Now the king has heard as follows, “You are at peace with the ruler of Qidša. The two of you take food and strong drink together.” And it is true. Why do you act so? Why are you at peace with a ruler with whom the king is fighting? And even if you did act loyally, you considered your own judgment, and his judgment did not count. You have paid no attention to the things that you did earlier. What happened to you among them that you are not on the side of the king, your lord? (EA 162 translated by Moran [1992]).
- May you know that Šipti-Ba-lu and Zimredda are acting disloyally together, and Šipti-Ba-lu said to Zimredda, “The *forces* of the town of Yaramu have written to me. Give me [...] 11 bows, 3 daggers, and 3 swords. Look, I am about to sally forth against the land of the king, and you are in league with me.” To be sure, he rejects [the charge of] disloyalty to the king, [saying], “The one who is disloyal is Paapu, so send him [t]o me.” (EA 333 translated by Moran [1992]).

Although the above examples come from the northern Levant closer to Mittani and Hittite forces where Egyptian interests would be more acute, the Egyptian intelligence system was established and functioning throughout this era. It is safe to assume that Pharaoh’s court was well aware of the political and economic situation of the Jordan Valley.

On occasion, specific people of interest were called to account and the rulers were expected to comply in handing the individual over to Egyptian authorities. Such was the case of the Mut-Bahlu of Pihilu being commanded to hand over the fugitive Ayyab in EA 256 or of Lab'ayu being called to account and the expectation that the rulers of the area would apprehend him and send him to Egypt as in EA 245. He could also be asked to hold and detain individuals for Pharaoh, such as Lab'ayu's command to hold or guard the men who seized the city of EA 252.

The Egyptian commissioner was the local authority to which the city rulers deferred. 'May the king, my lord, be informed that they have [ca]ptured the [ci]ties o[f] the king, m[y] lord, [but] the city in which I am I now keep under guard until I see the eyes of the commissioner of the king, my lord' (EA 237 from the eastern Galilee translated by Moran [1992]). Yet direct appeals to Pharaoh are made, including complaints of abuses of the exploitation of Egyptian commissioners such as in Jerusalem (EA 285).

A few of the letters relating to the Jordan Valley give hints of the Canaanite rulers paying tribute to Egypt. The ruler of Akka who wrote from Beth-shan in EA 234 makes reference in EA 235 to Pharaoh's request for a shipment of glass: 'the king, my lord has wri[ttten] to me for *glass*, [and] I herewith send 50 (units), [*their*] weight, to the king, my lord' (EA 235 translated by Moran [1992]). Lab'ayu does not mention what tribute he was to send to Egypt but argues that he sent it in EA 254: 'The fact is that I am a loyal servant of the king! I am not a rebel and I am not delinquent in duty. I have not held back my payments of tribute; I have not held back anything requested by my commissioner. He denounces me unjustly' (EA 254:10-16 translated by Moran [1992]). Letters from more distant southern Levant cities make reference to sending slaves and young maidens (EA 64, 268, 287 and 288), cattle (EA 301 and 242), and silver (EA 99 and 287). Other than the two letters just mentioned (EA 234 and 254), the letters of the Jordan Valley and connected cities only reference the sending of grain and the provision of corvee labor to the King's land. EA 224, written on clay originating in the Jordan Valley between Beth-shan Wadi Zarqa (Goren et al 2004:236), assures Pharaoh that although no grain is being shipped this year, he is

still loyal and will follow the commitments of his ancestors to send grain when he can:

Say to the k[in]g, [my lo]r[d], my [Sun]: Message of Šum-Add[a], the serva[nt o]f the king, my lord. I fall at the feet of the king, my lord, 7 times and 7 times. As to the king, my lord's, having written for grain ..., it has been destroyed. May the king, my lord, ask his commissioners whether our ancestors, since the days of Kusuna, our ancestor, always shipped [grain] (EA 224 translated by Moran [1992]).

From another letter originating in the Central Jordan Valley between Beth-shan and Wadi Zarqa (Goren et al 2004:248-249), reference is made to royal lands being cultivated by sons of Lab'ayu and not for the king: 'He also seized Gittirimmunima, and he *cultivated the fi[el]ds of the king, your lord*' (EA 250:45-47 translated by Moran [1992]). From Tanaach letter two, we learn that the city of Rehob in the Jordan Valley was responsible for helping to administrate the corvee labor and goods produced for the king from the Jezreel Valley around Taanach (see 3.2.1.7 *The Taanach Letters*). EA 36 from Alashia (Cyprus) further reinforces that Canaan was a major grain producer:

Now, my brother, I have prepared much copper [...] May the ships be many, send (them) here. The copper [...] since they have prepared much copper. Grain [in] ships from the province of Canaan [send to me as in] former [days], so that I may make bread [...] (EA 36 translated by Moran [1992]).

It has already been mentioned, primarily from letters 201-206 but repeated through many other letters that the cities were commanded, and responded to providing not only grain and provisions for the Egyptian army when they campaigned through the region, but they were also to add their forces to the auxiliary. EA 201 and 337 are typical examples:

- Say to the king, my lord: Message of Artamanya, the ruler of Siribašani, your servant. I fall at the feet of the king, my lord, 7 times plus 7 times. As you have written me to make preparations before the arrival of the archers, who am I, a *mere* dog, that I should not go? I am herewith, along with my troops and my chariots, at the disposition of the archers wherever the king, my lord, orders [me to go] (EA 201 translated by Moran [1992]).
- Say to the king, my lord, my Sun, my god: Message of Hiziru, your servant. I fall at the feet of the king, my lord, 7 times and 7 times. The king, my lord, wrote to me, "Prepare the supplies before the arrival of a large army of: archers of the king, [m]y l[ord]. May the god of the king, my lord, grant that

the king, my lord, come forth along with his large army and learn about his lands. I have indeed prepared accordingly abundant supplies: before the arrival of a large army of the king, my lord.

The king, my lord, wrote to me, "Guard Maya," the commissioner of the king, my lord. Truly, I guard Maya very carefully (EA 337 translated by Moran [1992]).

3.2.1.9.9 Possible Egyptian Campaign

Seventy letters from the Amarna collection are replies to an apparent order from a Pharaoh to prepare supplies for a campaign in the northern Levant against the Hittites. There is no clear evidence when, or if, this campaign took place. The actual Pharaoh who ordered the preparations to be made is also unclear. The style of EA 367 suggests Amenhotep IV but EA 233 from Acco is from the ruler Satatna, the son of Surata who ruled only after the death of Amenhotep IV (Rainey & Notley 2006:86-87). Perhaps the campaign was planned under Amenhotep IV but only executed or moved forward during Tutankhamen's reign.

For this immediate study, the preparations for providing supplies and logistical support reveal the campaign's two prong attack into the northern Levant. One prong goes up the coastal route from Megiddo (EA 247), Acco (EA 233), Sidon (EA 144) and Beirut (EA 141). The other prong was planned from Bashan and Damascus with the support of many Transjordanian towns. At least 16 towns from Bashan and the Transjordan responded. Most of these towns are unidentified. The main route identified by known sites was Ashtaroth (EA 256, 364), Damascus (EA 195) and Labana (EA 193). Unidentified towns east of the Jordan are Yama (EA 230), Paduzuna (EA 230), Shiptorisa (EA 226), Amayashi (EA 202), Zishamimi (EA 209), Zitriyari (EA 212,213), Hibiya (EA 178), Nukurtyya of Zunnu (EA 220), Yiqdasu (EA 221, 222), Baya (EA 216), Nazilu (EA 206), Unk (217, 218), Tobu (EA 205), Artamana Siribashani (EA 201), and Tziruf Zuhru (EA 336, 337). The number of towns in the eastern highlands demonstrates clear Egyptian communication and involvement in Transjordan with expected collaboration. Involvement must have, in part, crossed the Northern Jordan Valley from the gateway at Beth-shan and followed the routes east and north east.

Although Beth-shan, Pelha or Yanoam are notably absent from the list of responses, the main route from the Coastal Highway to Bashan and up to Damascus would have passed through these territories. Perhaps these letters were lost or, due to the traditional Egyptian garrison at Beth-shan, preparations were already assumed. But with the coastal highway secure and the regions of Bashan and the Transjordan lending support for Egypt, we can assume that the towns in between, in the Jordan Valley, were in the Egyptian camp and provided a secure environment that Pharaoh could count on for support.

3.2.1.9.10 The language of the Amarna Letters

A detailed analysis of the language of the Amarna letters is beyond the scope of this study. All but three of the letters in the entire Amarna corpus are written in Akkadian. The Akkadian does vary according to the region of the letters – north Levant, south Levant, Alashia (Cyprus) and Egypt are each distinct (Rainey & Notley 2006:88). The letters from the northern Levant are written in an ‘up-to-date’ Middle Babylonian Hurro-Akkadian dialect (Bohl 1909:21). The letters from the southern Levant, including the Taanach letters, are written in the older Old Babylonian dialect of the Middle Bronze Age period (Rainey & Notley 2006:88). The southern Levant letters maintain a consistent West Semitic syntax, colloquialisms and grammar influences that, for lack of a better term, Rainey calls ‘Canaanite’ (Rainey & Notley 2006:88). Both Moran and Rainey conclude from their language analysis that the southern Levant had a distinct West Semitic language, and that sometime between the end of the Middle Bronze Age and the beginning of the Late Bronze Age II, a unified scribal caste rose in the southern Levant that was independent of Egypt and arrived at some agreement of standardization for international correspondence (Moran 2003:9-115; Rainey & Notley 2006:88). These factors describe a southern Levant independent social-linguistic group.

3.2.1.10 Late Bronze Age II: Tutankhamen (1336-1327), Ay (1327-1321) and Horemheb (1321-1295)

Other than the Amarna records suggesting preparations for a possible northern Levant campaign under the reign of Amen-hotep IV or Tutankhamen (see 3.2.1.9.9).

There are no records of the 18th Dynasty's last three Pharaohs' involvement in the southern Levant. Horemheb might have tried instigating a rebellion in central Syria and the northern coast against the Hittites (Redford 1992:177). This activity would assume some right of passage along the Coastal Highway through the Jezreel Valley, but the records are silent on Canaan. Egyptian interests, as expected, are more concerned with the growth of northern empires than the squabbling city states of southern Canaan as last seen in the Amarna Age.

Tutankhamen died a young man without an heir to the throne which led to the military seizing power. The next three Pharaohs rose to power from the position of generals in the army. Redford suggests that Asian pressures on the Egyptian empire emboldened the military's hand to take political action, but due to internal unrest in Egypt, were unable to field an advancing army (Redford 1992:179). During the last half of the 14th century BC, Egypt had lost Amurru and Kadesh to the Hittites. Although Egypt had not given up the southern Levant, the Pharaohs preoccupation elsewhere gave truth to the saying, 'while the cat's away, the mice will play.' Small groups and nations rose up and began establishing new nations and moving into new territories. The 'Apiru in north Lebanon established a kingdom. 'Apiru in Amki, Bashan and the Palestinian highlands increased their banditry and harassing nomads from the Transjordan moved into Galilee, Syria and across the Negeb around Gaza and Ashkelon. Redford also postulates that this was the reason for the Egyptian fortification of the Coastal Highway with regular blockhouses and the need for Egypt under Seti I to campaign in the Levant once again (Redford 1992:179).

The Egyptian record of Dynasty XVIII and the Late Bronze Age II closes with Pharaoh Horemheb acknowledging the pressures from the groups moving into Canaan but still claiming control of the traditional boundaries of the Empire, even though it was threatened by foreign migrants. From Horemheb's tomb in Memphis, Gardiner translates:

[The foreign lands beg]inning at the southern frontier of Kush [as far as Naharin...], Pharaoh has given them into your keeping for the security of her borders [in accordance with what] Pharaoh has [said], just as was the practice of your ancestors from remote antiquity. Now [if it is] reported that some foreign peoples who know not how they should live have come

[having abandoned] their lands, hungry and living like wild game, [their] children [likewise], then the All-Powerful shall send his victorious sword before [his host in order to] slay them and destroy their towns, and set fire [to those] foreign lands, and put other people in their places. (General Horemheb's tomb inscription in Memphis translated by Gardiner [1953:7-8]).

3.2.2 The 19th Dynasty Late Bronze Age III

At the beginning of the 13th century BC, the 19th Dynasty of Egypt appears to be reasserting control over the southern Levant and the Jordan Valley. Ramesses I, who rose through the military ranks and his son Seti I began to campaign to project Egypt's power to the north once again.

3.2.2.1 Ramesses I (1295-1294) and Seti I (1294-1279): Late Bronze Age III

Beginning in the 19th Dynasty, Pharaoh Ramesses I sent his son, Seti I, into the Levant. Ramesses I, founder of the 19th Dynasty, had a reign of only one year (1295-1294). During his first and only year as Pharaoh, his son, Seti I was a general leading a campaign in the northern Levant. A stele that Seti I set up in Nubia briefly mentions this campaign to the lands of Fenhu: 'I [smote] for [him (= Ramesses I)] the lands of the Fenhu and I repelled for him the dissidents who were on the highlands' (Kitchen 1969:111, lines 7-15).

Fenhu is the Egyptian name for the area of Phoenicia along the Lebanese coast (Aharoni 1979:65). A campaign on the Lebanese coast would require safe routes through the Jezreel Valley with secure flanks into the Jordan Valley. However, any conclusion of a secure flank at Beth-shan during the reign of Ramesses I, must be tempered with a military campaign throughout the southern Levant including the Jordan Valley and the Negeb during Seti I's first year as Pharaoh. This campaign is recorded on the bottom register on the eastern side of Dynasty 19's Hypostyle Hall at Karnak, on Papyrus Anastasi I, 27 and Seti I's stele from Beth-shan.

3.2.2.2 Seti I campaign in the southern Levant

Seti I's first campaign of Egyptian re-engagement with the Levant closely followed the route and strategy of Thutmose III. Seti I's first campaign secured the Coastal Highway, the Jezreel Valley, the northern part of the Jordan Valley and the route up

the eastern highlands by the Yarmuk. Subsequent campaigns then focused on the northern Levant.

For Seti I, there was a new group of people to which he had first to attend. They were the Shasu of the Negeb and the mountains of the southern highlands. Although this campaign is outside our geographic study, the Shasu show up in relation to the Jordan Valley in later literature (see 3.2.3.2).

The battle with the Shasu is pictured in two reliefs of the north wall of the hypostyle hall at Karnak. The first of two pictures regarding the Shasu depict them on top of a hill and Pharaoh charging up against them (Epigraphic Survey 1986: Plate 5). Rainey is certain that this encounter took place on a northern Sinai coastal road due to the positioning of the account in relation to Egyptian forts along the route (Rainey & Notley 2006:93). The second depiction is that of the Shasu near a Canaanite city (Epigraphic Survey 1986: Plate 3). Although the location is unclear, it could be in the western Negeb (Rainey & Notley 2006:93). It is clear that the Egyptians separated the Shasu people from the people of the Canaanite cities in this battle. This is evident when comparing the Shasu depictions of Plates 3 and 5 to the standard west Semitic Canaanite prisoners depicted on Plate 12 of the Epigraphic Survey 1986. In further study on Merneptah's Israel (beyond the scope of this thesis), this point could be significant if one pursues the line of study that the Egyptian literature does not view the Shasu as Hebrews but that the Hebrews could be considered Shasu. Rainey supports this line of thought with the close association references to the Shasu alongside the Karnak reliefs of Merneptah's campaign in the southern Levant that parallels the Merneptah stele (Rainey & Notley 2006:99-100).

The first reference to the troublesome Shasu is in the beginning of the campaign:

Regal year one of the "Repeater of Birth," the king of Upper and Lower Egypt, Men-ma'at-Re', given life; one came to inform his majesty: "The foe belonging to the Shasu is plotting rebellion. Their chiefs are gathered together, waiting on the mountain ridges of Kharu [Hurru]. They have begun clamouring and quarrelling, one of them killing his fellow. They have no regard for the laws of the palace (Kitchen 1969: 9, lines 3-8).

On the eastern side of the north wall of the Hypostyle Hall at Karnak, combat with the Shasu is pictured in two scenes and inscribed as 'Regal year one of the king of Upper and Lower Egypt, Menma'at-Re': The desolation which the might arm of Pharaoh ... wrought among the foe belonging to the Shasu –from the fortress of Sillo to the Canaan' (Kitchen 1969:9, lines 8-12).

3.2.2.2.1 Seti I's campaign into the Jordan Valley

With the coastal road clear, Seti I relieved the city of Beth-shan which had been occupied by Canaanite forces of the Jordan Valley. After dividing his forces across the northern part of the Jordan Valley, he continued campaigning up the eastern highlands. Seti I's stele from Beth-shan reads,

[t]hat day one came to speak to his majesty as follows: "The wretched enemy that is in the town of Hamath has assembled a great host of people to himself. He has seized the town of Beth-shan. Then, in league with them of Pehel, he does not permit the prince of Rehov to come outside. Thus, his majesty sent the first army of Amon, "Mighty of Bows," to the town of Hamath, the first army of the Re, "Great of Valour," to the town of Beth-shan, and the first army of Sutekh, "Strong of Bows," to the town of Yanoam. It happened in the space of one day that they were overthrown by the glory of his majesty (ANET 1955:253).

The towns referenced in this stele Beth-shan, Pehel and Rehob have been identified with some certainty and Hamath and Yanoam have likely candidates (see 2.3.1.2.1). Albright identifies Hamath with Tell el-Hammeh located (16 kilometers) southeast of Beth-shan (Albright 1926:42-43). Rehob and Pella were the two largest cities in the northern section of the Jordan Valley in this period and would have been natural economic rivals. Hamath is a much smaller site and was probably under the administrative authority of Rehob (i.e. Tanaach letter two). The scenario painted by Albright, Redford and Rainey is that Rehob was the traditional administrative power for Egypt for this area. The ruler of Hamath wanted more power from her overlord at Rehob. Pella, looking to lower her rival Rehob, supported a military move by Hamath by neutralizing the Egyptian garrison at Beth-shan. The combined forces then laid siege to Rehob (Albright 1926; Redford 1979:180-181; Rainey & Notley 2006:93).

That the small secondary city of Hamath, in league with Pehel, could capture the Egyptian outposts at Beth-shan leads to a conclusion that the Egyptian force in Beth-

shan was very lax or simply a small representative force, demonstrating the years of neglect the late Pharaohs of Dynasty XVIII gave to the area. The fighting between these Canaanite cities still reflected the general atmosphere of inter-city rivalry seen in the Amarna letters. The main difference in this new time was that Hamath was taking direct action against neighboring cities with no pretext that this action was done on behalf of Pharaoh. Hamath and Pella were actually making direct moves to neutralize Egyptian power. That these two cities could dream of attacking Beth-shan and keep their gains, speaks of their confidence in the lack of the Egyptians' ability to respond in strength or in their own diplomatic skills in gaining Egyptian recognition after Rehob had been removed.

Seti I responded in strength, sending at least three divisions of his army to the Jordan Valley. Upon entering the Jordan Valley, Seti I's division encountered little resistance for they divided their forces and relieved Beth-shan, subjugated Hamath and took Yanoam without delay. There is no mention of action against Pella but one can assume Pella was brought back into the Egyptian camp reluctantly or not.

Seti I moved decisively against Hamath and Peheh's aggression against Rehob. The Egyptian forces divided with one division occupying Beth-shan, another moving on Hamath and a third crossing the river and moving up the eastern highland to strike Yanoam. The Beth-shan stele does not mention Pharaoh's action at Rehob or Peheh, although the attack of the Amon division on Hamath would have effectively relieved the siege at Rehob.

The topographical list at Karnak adds both Peheh and Yanoam to cities that Seti I visited on this campaign. The topographical list on the Karnak relief lists 17 cities visited by Seti I on his first campaign. Those sites associated with the Jordan Valley are listed below:

Table 3.6: Sites from Seti I's first campaign relating to the Jordan Valley

Number	Transcription	Identification	Discussion
1	p-h-r	Peheh	Tabaqat Fahl (Pella)
2	h-m-t	Hammat	Ell el-Hammeh

3	b-t s-r	Beth-shan	Tell-el-Husn
4	y-n-w-‘-m	Yanoam	<p>Tell El-‘Abeidiyeh-identified by Aharoni. This site on the southern shore of the Galilee fits the stele description best for being attacked in the same day as Hammat and Beth-shan. (Aharoni 1979:178)</p> <p>Tell Shihab – identified by Rainey, fits better with a Seti I stele fragment found southern Bashan due to EA 197 association (Ahituv 1984:199)</p> <p>Tell Shihab is the better candidate (2.3.1.2.1).</p>
15	q-r-t ‘-n-b	Kiriath-anab = En-anab?	Sometimes equated with Tell Shihab but is a different sited in the region of Bashan (Aharoni 1979:170) as Yanoam is a more likely candidate for Tell Shihab

The remaining 13 cities listed on relief are located farther north in the Upper Galilee and along the coast.

Yanoam is not mentioned in the Hamath/Rehob affair. It is unknown whether Yanoam was directly involved in the Hamath/Rehob affair or was simply no longer supporting Egyptian interests. Either way, Seti I took the opportunity to bring Yanoam back into the Egyptian fold and secure the route to the Syrian Plateau in preparations for his next campaign to the north as shown by listing it on subdued city list in the topographical list at Karnak.

Of the three divisions Seti I sent to the Jordan Valley, the Sutekh division successfully accomplished the task of subduing Yanoam. This is another textual example demonstrating the strategic routes through the Jordan Valley up to the Syrian plains. The route up towards Bashan from the Jordan Valley was clear enough to move a large military force through. As during the time of Thutmose III, this same route was strategic to hold in connecting the Jezreel Valley with the Syrian plateau and securing the flank of the Coastal Highway for campaigning in the north. Was Seti I simply bringing Yanoam back into the Egyptian camp for economic reasons or was he needing to secure his flanks from enemy forces coming from the Syrian plains into

the Jordan Valley and threatening to cut his coastal supply line? The answer is probably yes to each of these questions.

An undated fragment of a stele from Seti I was found at Tell Shihab (Kitchen 1969:17). Although it is unknown when the stele was erected, Seti I's first campaign led to some kind of occupation of the site during his eleven-year reign. In the Karnak inscription from Seti I in the second register (after the Pehel glyph), a battle is shown that could match the general terrain of Tell Shihab strengthening the case for identifying Tell Shihab with Yanoam over Tell El-'Abeidiyeh in the Jordan Valley (see 2.3.1.2.1).

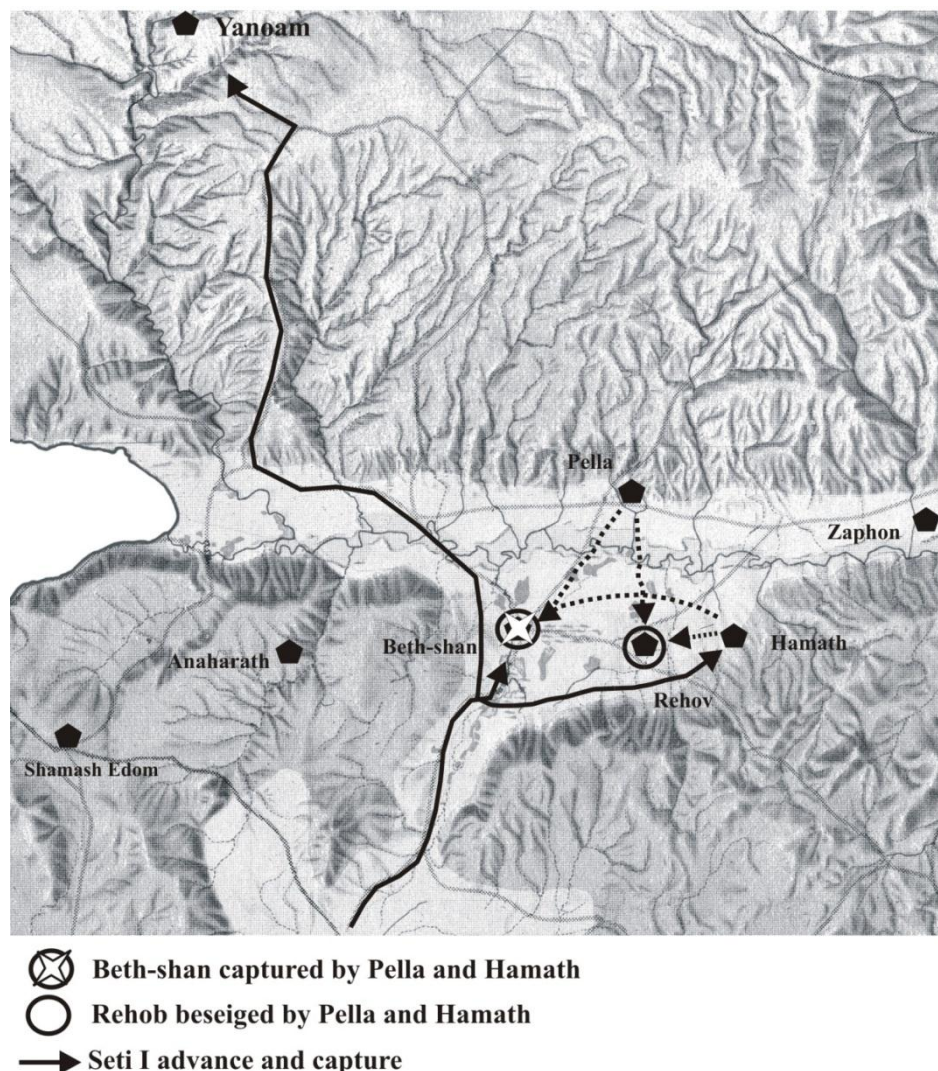


Figure 3.10: Seti I relieves Beth-shan and Rehob

Details of Seti I's campaign from the Beth-shan stele: The town of Hamath, in league with Pella, captured Beth-shan and besieged Rehob. Seti I responded by sending three units into the central northern valley. The army of Re' retook Beth-shan. The army of Amon captured Hamath, lifting the siege of Rehob. The Sutekh unit moved up the eastern highlands, subdued Yanoam and presumably the rest of the highlands before moving down towards Hazor. Egyptian forces and reputation in Beth-shan and the Jordan Valley must have been weak for Hamath and

Pella to take Beth-shan and cut off Egyptian communications to points east of Beth-shan (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

The rest of the Karnak inscription deals with the Seti I campaign further north to Byblos and Kedesh. Their rich resources and trade routes for the northern Levant would have been the main interest for Seti I's further campaigns. A second stele of Seti I was also found at Beth-shan. The portion giving the date is broken off. The text describes the defeat of a Semite rebellion of 'Apiru in the mountains of Yarumutu. Aharoni identifies Yarumutu with Jarmuth of Joshua 21:29 allocated to the tribe of Issachar in the Lower Galilee overlooking Beth-shan from a distance (Aharoni 1979:179). This places an anti-Egyptian group of 'Apiru in the highlands north of Beth-shan and overlooking the Jordan Valley. However, Rainey argues that Yarumutu of the Beth-shan stele could also be the Yarimuta of the Amarna Letters (EA 85:35) in the Lebanese mountains (Rainey & Notley 2006:94). Taking into account both the Egyptian and Biblical records, both locations had active groups that would be considered 'Apiru by Egyptian standards. The stele references a people called Tayru with the 'Apiru. Albright identifies these people with Tiria of 1 Chronicles 4:16, in name but not location as they were descendants of Caleb and associated with the area of Hebron (Judges 1-2; Albright 1952:24-32). The Asiatics of Ruhma are unknown. Aharoni and Ahituv both assume they are located in the area of mount Yarmuta (Aharoni 1979:179; Ahituv 1984:122).

The stele reads:

On this day, now, [one came to inform His Ma]jesty, blessed be he, thus: "The Apiru of the mountain of Yarmutu, along with the Tayaru [folk, they] are arisen, attacking the Asiatics of Ruhma." Then said [His Majesty]: "Who [do they] think they are, these despicable Asiatics, in [taking up] their [arms] for yet more trouble? They shall find out about him whom they did not know — [the Ruler val]iant like a falcon and a strong bull wide-striding and sharp-horned, [spreading his wings [firm]] as flint, and every limb as iron, to hack up the [entire] land of Dja[hy]!"

Then His Majesty, blessed be he, commanded a detachment of men from his ample [infantry and ch]ariotry to turn back against the land of Djahy. When a period of two days had elapsed, [they returned in peace] from the land/mountain of Yarmutu, bringing the tribute [?from these Asiatics?, and] prisoner[s] as plunder [wrought by His Majesty?] — it was/by the power of his father Amun-Re that decreed for him valor and vic[tory [forever?] — [even] the King of Southern and northern Egypt, Lord of Both Lands,

Menmare Heir of Re, Son of Re, Lord of [Crowns], Sethos I Merenptah, like Re (Kitchen 1993:12-13).

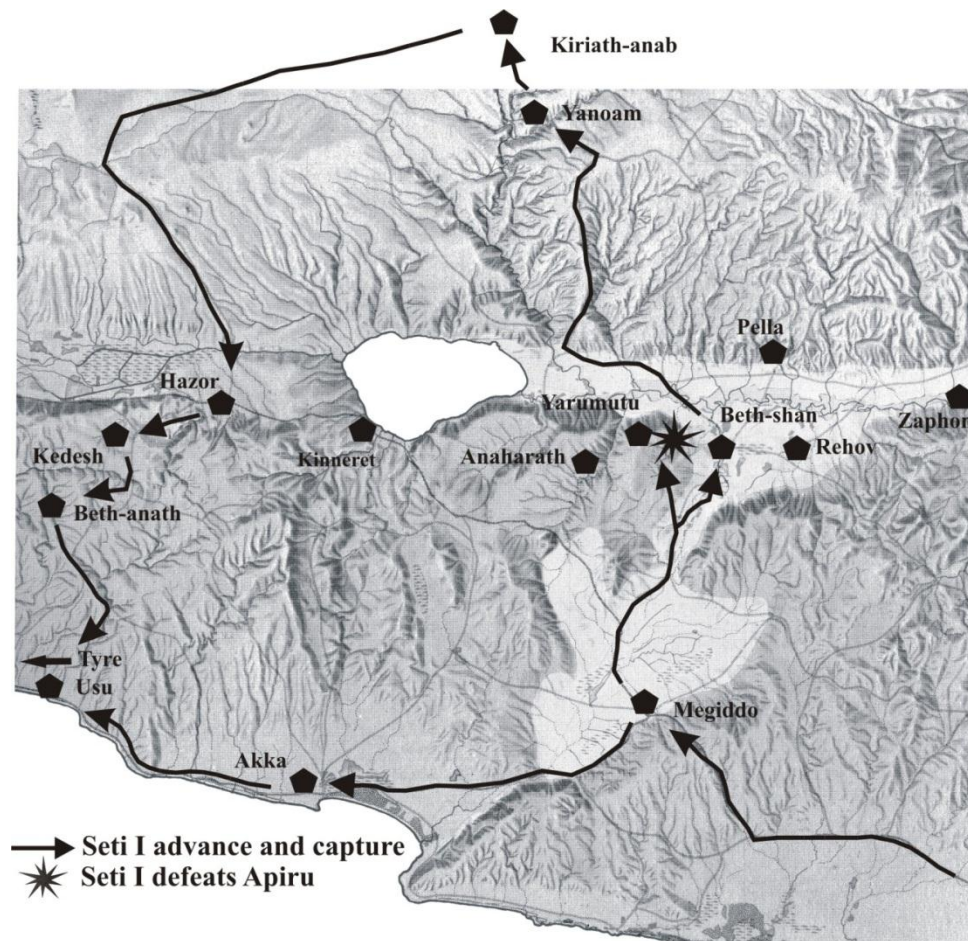


Figure 3.11: Seti I's campaign north from Karnak relief and Beth-shan second stela
After defeating a rebellion of Shasu in the Sinai, Seti I continued north to reaffirm Egyptian control at Megiddo, the Central Jordan Valley, the eastern highlands, the upper Galilee and then headed further up the northern coast. In the Yarmuta mountains overlooking Beth-shan and the northern central valley, Seti I defeated a force of 'Apiru (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.2.2.3 Ramesses II (1279-1213): Late Bronze Age III

Despite Ramesses II's prolific building programs, only a few inscriptions make references with implications on the Jordan Valley. Ramesses II continued projecting Egyptian power to the northern Levant against the Hittites. The first eight years of his 63 year reign was spent in conflict with the Hittites over the northern Levant and Central Syrian Plateau. At the beginning of his reign, Canaan appeared to be firmly under Egyptian control as he campaigned north of Beirut (Rainey & Notley 2006:96-97).

In Ramesses II campaign against the Hittites, in his fifth year, the climax was the battle of Qidus/Kedesh. The reliefs and annals give little detail regarding the southern Levant. The Poem describing his campaign states only that:

His majesty passed the fortress of Sile. He was mighty like Montu when he goes forth, every foreign country was trembling before him, their chiefs were presenting their tribute, and all the rebels were coming, bowing down through fear of the glory of his majesty. His infantry went on the narrow passes as if on the highways of Egypt. Now after days had passed after this, then his majesty was in Rameses Meri-Amon, the town which is in the Valley of Cedar (ANET 1955:255-256).

From leaving the Nile Delta at Sile to arriving on the Lebanese coast, it appears that all the southern Levant was firmly under Egyptian control at the start of this campaign. The cities paid their tribute and supplies to Pharaoh. The army was marching through the Jezreel Valley as if they were on the streets of Egypt with no fear of molestation from the local inhabitants. The statement that 'the army marched through the passes and valleys as if on the roads of Egypt' (ANET 1955:255-256, line 33) paints a similar picture of the southern Levant as it was when Pharaoh Ahmos was able to surprise the forces of Mittani in Nahrina. The route Ramesses II took through the southern Levant would have certainly been along the coastal Highway and cutting across the Jezreel on the western side. The case has already been made (see 3.2.1.1) geographically that control of the northern half of the Jordan Valley would be included for security of flanks for this critical supply line. Although claiming victory, Ramesses II returned to Egypt and the Hittite forces advanced and conquered Apa (Damascus) plundering the countryside (Rainey & Notley 2006:98 referencing the Hittite literature KUM XXI, 17 1:14-21 XXXI, 27:208).

The blow to Egyptian military power and reputation and the expansion of Hittite power south must have encouraged the cities of Canaan to act against Egyptian interests.

In Ramesses II's regal year eight, immediately after the battle of Qidsu and the Hittite advance into central Syria, Ramesses was putting down rebellious cities in both the western highlands of Galilee and the southern Transjordan highlands (Redford 1992:185; Rainey & Notley 2006:98).

The reliefs of year eight at Karnak show that even the previously strong Egyptian garrison town of Askelon rebelled. Ramesses II put down this rebellion in Askelon, along with several other cities in the Upper Galilee (ANET 1955:255). A fragment of a stele from Ramesses II 9th year was found in Beth-shan. The recovered fragment reads, 'Year 9, 4th month of the second season, day 1[...]When day had broken, he made to retreat the Asiatics [...]They all come bowing down to him, to his palace of life and satisfaction, Per-Ramses-Meri-Amon-the Great of Victories[...]' (ANET 1955:255).

The stele fragment is recounting a specific action in a campaign against the Asiatics. Aharoni assumes that this campaign was in the immediate region and that it passed through Beth-shan. Aharoni also associates the undated campaigns with a topographical list from the west gate of Amarna and the Luxor temple as one of these two campaigns from Ramesses year eight or nine (Aharoni 1979:182). The Amarna list sites action along the coastal highway at Joppa, Socho on the Sharon Plain, the city of Dor on the coast near the Jezreel Valley as well as across the Negeb and in the area of Edom (Kitchen 1996:49-50). The Luxor topographical list includes reference to the city Baruta in the land of Moab (Ahituv 1984:143) as well as t-b-n-l (Ahituv 1984:189) which has been identified with Dibon.

If these two topographical lists are combined into one campaign or two successive years of campaigning, they show a two pronged military attack along the Transjordan north-south route that will later be named the 'King's Highway.' One prong moved across the Negeb, close to or including the copper mines of Timna that were active from at least Seti I's time, and into the mountains of Edom. The other prong, passing through Beth-shan, crossed the valley and ascended to the Madaba Plateau. It is impossible to determine the route of ascent due to the lack of detail. The army could have followed the same route as Thutmose III, who appears to have ascended along the Wadi Zarqa (Jbr #92 in source List from Thutmose III topographical list), or from the Plains of Moab up towards the Madaba plateau. Either route would clearly impact the cities of the Jordan Valley by demonstrating the presence and power of the Egyptian military in the region. The cooperation of the Jordan Valley cities must have been assured for the campaign to continue up into

the eastern highlands. It was only three years from his first campaign to the north when Pharaoh walked through southern Canaan 'as if on the highways of Egypt' (ANET 1955:255) sending troops along this very route to subdue the rebelling cities in his years eight and nine. As no city from the Jordan Valley is listed in this campaign, it is impossible to tell the loyalty of the population. However, a number of cities along the coastal highway and the north-south Transjordanian highway rebelled.

The campaigns of years eight and nine must have been successful enough for Ramesses II to stretch his supply line out, allowing him to return to campaigning in the north. These northern campaigns ended with a peace treaty between the Egyptians and Hittites in Ramesses II's twenty-first year. The exact border between these two empires is unclear but it was clearly north of Apa (Damascus) as seen in Papyrus Anastasi I.

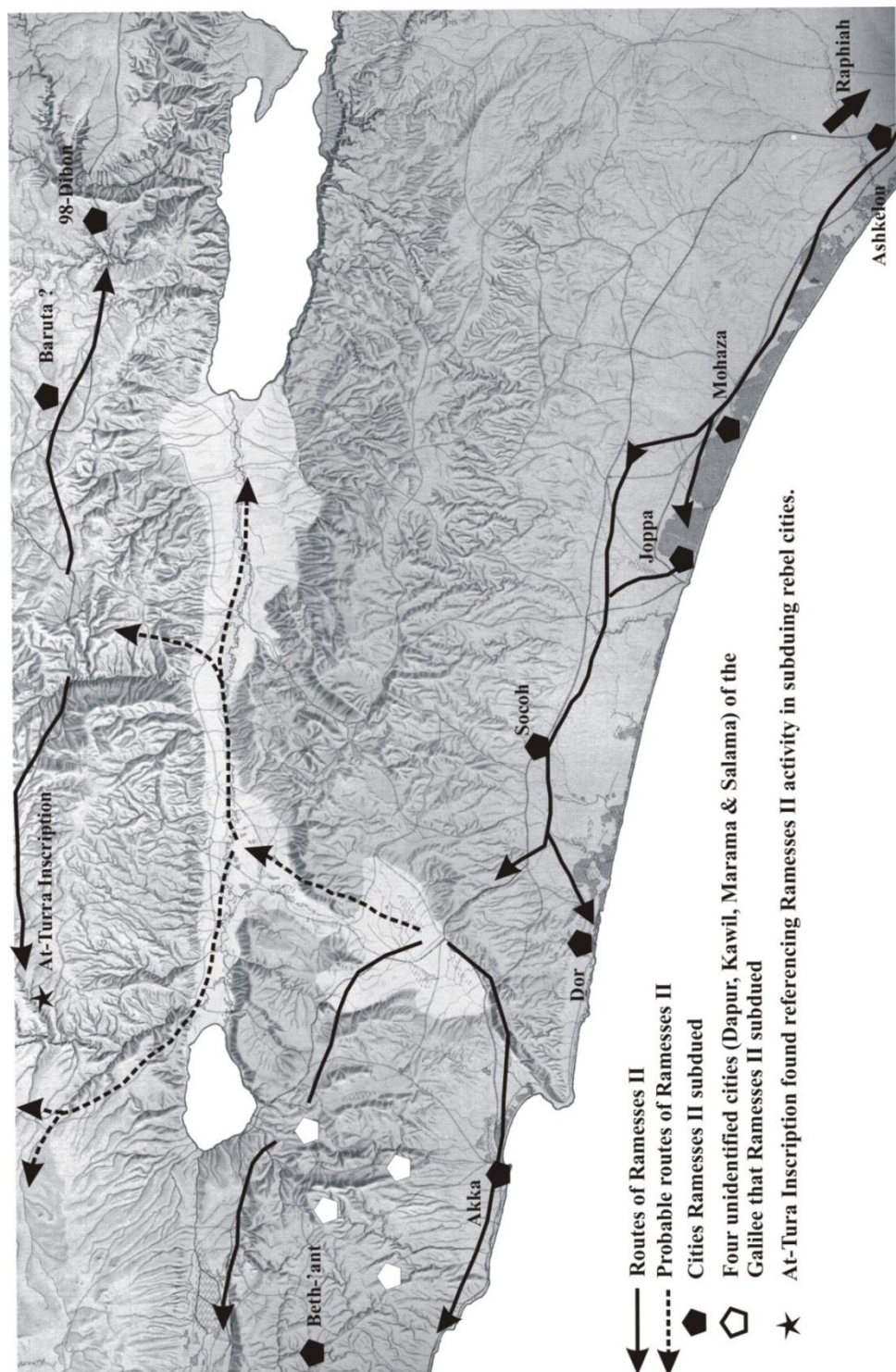


Figure 3.12: Ramses II subdues the southern Levant after the Battle of Kadesh
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

After Ramses II withdrew from the Battle of Kadesh and continual Hittite expansion into central Syria, Ramses II faced rebellion in the southern Levant. Although no record of rebelling cities in the Jordan Valley are known, Ramses II marched along the coastal highway and Transjordanian highway subduing rebelling

cities much closer to Egypt than those in the Jordan Valley. Assuming Ramesses II would have followed a similar route as Thutmose III, his troops would have marched through parts of the Jordan Valley. The actual route and the loyalty of the Jordan Valley cities are unknown although it is safe to assume that the cities of the Jordan Valley would have taken opportunity of the situation to act more independently as in the reign of Seti I.

3.2.2.3.1 A newly discovered Ramesses II stele

In the 1990s two stelae of Ramesses II were discovered. In 1994, 15 kilometers south of Damascus, a stele with six lines of text and a scene portraying Ramesses II with Atum or El was discovered covering a Roman tomb in the town of al-Kiswah (Kitchen 1999:133-138). The newest stele found in 1999 was in the Jordan village of At-Turra, five kilometers south of Tell Shihab (possible Yanoam). It is in secondary use as a wall stone in a local mosque. The stele remains has eight partial lines and part of Ramesses' name used exclusively during his regnal years 2-20 (Wimmer 2002:5). The eight partial lines read:

- 1 [...] --?-- [...]
- 2 [... of] Nepri, begotten by Geb, [...]
- 3 [...] who [es]tablisthes the heirs on their thrones [...]
- 4 [... of] name, sacred of titulary, King of Egypt, [...]
- 5 [...] the beloved [...], brave of name, the bravest of war[rriors, ...]
- 6 [...] to make them as columns at their place, to make [...]
- 7 [...] the rebels, th[eir] fortification [...]
- 8 [... [Wsr]MAa.t[Ra] stpnRa)/, the son of Ra: [Ramss mrjJmn]/ [...]

(Translated by Wimmer 2002:3).

Nepri and Geb of line two are Egyptian gods of the earth. Nepri is the cereal god and personification of grain. Geb is responsible for the fertility of the ground. Both are often paired together and Pharaoh is sometimes referred to as the 'son of Nepri.' Wimmer initially translated Jwn.tjw as 'columns' in line six, making reference to possible Egyptian building activity. He now considers the warlike nature of line seven to influence the translation of Jwn.tjw of line six to be read as an abbreviation of 'beduins' or like the wandering Shasu (Wimmer 2002:4). Wimmer compares line seven with similar Ramesside phrases like 'the rebels crushed, their strongholds destroyed' and 'who causes the rebels to flee from their fortifications.' In this

context, it is easy to picture the stele representing Ramesses II's early campaign against the region as in his regnal year 8/9 campaign. This author would like to read the lines as something like, 'Pharaoh, son of Nepri, King of Pharaoh and bravest of all warriors was victorious – making them like wandering beduins. The rebels and their fortifications crushed.' Line eight preserves enough of the unique royal name of Ramesses II to date the stele to years 2-20 of his reign (Wimmer 2002:5). This stele further ties the Jordan Valley to the Bashan and eastern highlands in two ways: the focus on cereal and agriculture terminology ties the Bashan and Jordan Valley together as similar sources of grain for Egypt and Egyptian military activity against both local populations in the same time period. Mapping the Ramesside and Seti I stele locations further strengthens the case of Tell Shihab being the key site of Yanoam as well as mapping out the Egyptian route from the Jordan Valley up to the eastern plateau towards Damascus.

The following table lists royal stelae relating to this study:

Table 3.7: Ramesside Royal Stelae

Location	Pharaoh	Description	Discovery and Collection
Beth-shan	Seti I – year 1	Complete	1923; Jerusalem
Beth-shan	Seti I - undated	Upper part and left side missing	1921; Jerusalem
Beth-shan	Ramesses II – year 18	Complete	1923; Philadelphia
Beth-shan	Ramesses II - undated	2 fragments of scene and text	1923, 1925; Jerusalem, Philadelphia
At-Tura	Ramesses II – year 2-20	Lower part, incomplete on three sides	1999; in situ
Tell Shihab	Seti I – undated	Upper part, scene	1901; Istanbul
Sheikh Sa'ad	Ramesses II – undated	Complete, badly eroded	1891; unknown
Al-Kiswa	Ramesses II – year 56	Upper part missing	1994; Damascus

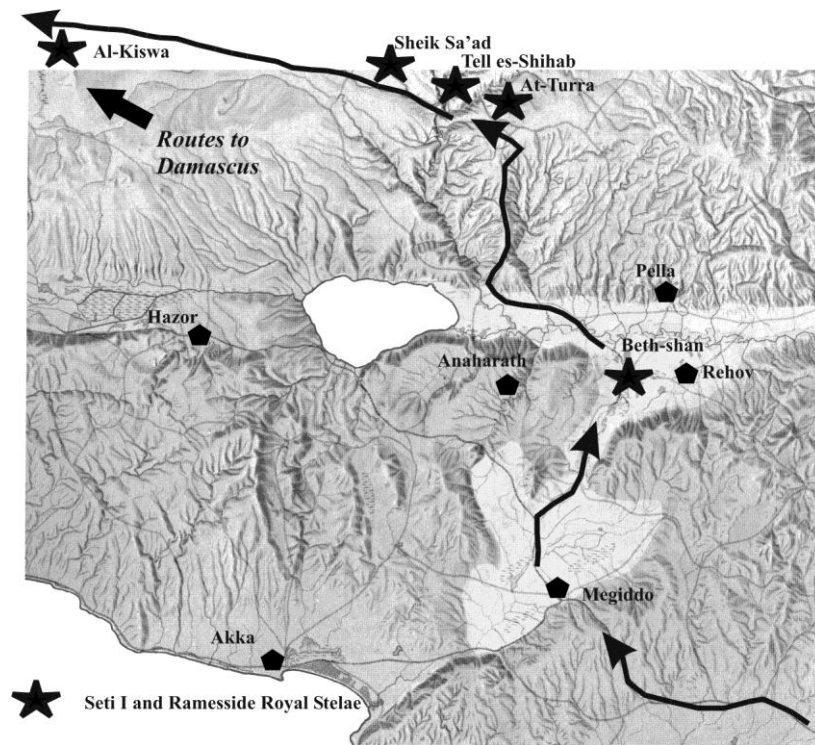


Figure 3.13: Seti I and Ramesses II Stelae in the Jordan Valley and eastern highlands
The location of Seti I and Ramesses II's stelae line up along a route running across the Hauran towards Damascus (Table 3.7). This suggests that the main route from the Jordan Valley went past Pella and up the ridge just south of the Yarmuk River gorge (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.2.2.4 Papyrus Anastasi I: Late Bronze Age III

In the 1820s, the Sallier and Anastasi collections acquired several literary manuscripts which have the same copyist, similar content to one another, and are linked by being found in the cemetery of Memphis at Saqqara. These papyri are now preserved in the British Museum. The nine Anastasi and four Sallier papyri are dated to the Ramesside periods.

Several copies of varying levels of completeness of Papyrus Anastasi I exist. Gardiner dates these copies to the reign of Ramesses II since the name of Ramesses II appears in several of the copies (Gardiner 1964:2-4). Aharoni dates the content of at least the first three Anastasi papyri to the reign of Ramesses II (Aharoni 1979:182-183).

Papyrus Anastasi I is a long satirical letter between two military scribes. One, Hori, is challenging the skills and knowledge of his fellow scribe, Amenemope. The main point of the letter seems to be to ridicule the irresponsible and second-rate scribe (Gardiner 1964:4). Several sections of the letter paint a hypothetical description of the route a scribe, on his chariot, would take through Canaan. The context of the

letter describes these geographic routes as basic knowledge that any professional would know and be able to traverse. Thus we can assume that the routes Hori describes were long established Egyptian routes through Canaan.

The established routes described by Hori that an Egyptian chariot would take in areas around and through the Jordan Valley are described in lines 21.4-23.1 of Papyrus Anastasi I:

Come, set [me] on the way southward to the region of Acco. Where does the road of Achshah come? On which side is the town? Inform me, please, concerning the mountain of User [“Mighty Mountain”]. What is its headland like? Where does the mountain/land of Shechem [Sa-ka-ma] come? Who will capture it? As for the mahar, where does he make the journey to Hazor [Ha-su-ru]? As for its ford, what is it like? Put me [on] the route to Hamath [hu-ma-ta], Degel [Da-ga-al], and [Da-ga-a-l-‘i-l], the avenue of every mahar. Inform me, please, about its road and show me Ya’anu [Ya-‘a-nu]. If one is travelling to ‘Idamim [‘i-da-mi-mi], which way is the face? Do not hinder your teachings! Guide us [to] know them!

COME let me tell you other towns which lie above them. You have not gone to the land of Ta[h]ta [Ta-a[h]-sa], Kawil-marruna [Ka-wi-il-ma-ar-ru-na], Tamintu [Ta-min-tu], Qedesh [Qid-su], Dapuru [Da-pu-ru], ‘Aziya [‘A-si-[y]a] or Harnaim [Ha-ar-nam-ta]. You have not seen Qiriath-‘Anab [Qi-ir-ta-‘-n-bu] with Beth-Sopher [Bi-ta-su-pi-r]. You do not know ‘Aduro[n]a [‘A-du-ru-[n]a] or Sidipot [Si-di-pu-ta] either. You do not know the name of Hallas [Ha-la-sa], which is in the land of ‘Opa [‘U-ps], the bull upon its boundary, the place where the battle array of every hero is seen. Inform me, please, about the form of Qiyna [Qi-y-na], let me know Rehov [Ra-ha-bu], explain to me Beth-shan [Bi-y-ta-sa-‘a-[al]] and Tarqa-El [Ta-ra-qa-‘i-l]. As for the fords of Jordan [Ya-ar-du-na] how is it crossed? Let me know the route passing Megiddo [Ma-k-ta], which is on it (Rainey & Notley 2006:102).

Table 3.8: Cities listed in the Papyrus Anastasi I between lines 21.4-23.1 (Ahituv 1984; Aharoni 1979)

Transcription	Identification	Location/Discussion
<i>User</i>	Mountain of User	The mighty mountain: Mount Carmel not Mount Hermon (Aharoni 1979:182-183)
<i>Sa-ka-ma</i>	Mountain/land of Shechem	Probably Mount Ephraim, an area controlled by the city of Shechem (Aharoni 1979:183)
<i>Ha-su-ru</i>	Hazor	(Ahituv 1984:116)
<i>hu-ma-ta</i>	Hamath	Probably the Hamath on the Sea of Galilee due to its proximity in the list to Hazor as opposed to, but possible to be, the Hamath identified with Hamath-gader (el-Hammeh) on the Yarmuk River or Tell el-Hammeh just south of Rehob

		(Aharoni 1979:182 and Ahituv 1984:112-113)
<i>Da-ga-al</i>	Degel	An unidentified city in the Jordan Valley near to Degel-El (Ahituv 1984:86)
<i>Da-ga-a-l-'i-l</i>	Degel-El	An unidentified city in the Jordan Valley, probably in the northern most populated section (Ahituv 1984:86)
<i>Ya-'a-nu</i>	Ya'anu	Yanoam (Aharoni 1979:183) or an unidentified city on the road to Adumin near the Horns of Hittim (Ahituv 1984:196)
<i>'i-da-mi-mi</i>	'Idamim	Adami-nekeb – Khirbet et-Tell above Khirbet ed-Damiyeh in the Galilee (Aharoni 1979:183)
<i>Ta-a[h]-sa</i>	Ta[h]ta	North Syria (Ahituv 1984:185-187)
<i>Ka-wi-il-ma-ar-ru-na</i>	Kawil-marruna	In the Beqaa' (Ahituv 1984:125)
<i>Ta-min-tu</i>	Tamintu	North Syria (Ahituv 1984:187)
<i>Qid-su</i>	Qedesh	North Syria (Ahituv 1984:198)
<i>Da-pu-ru</i>	Dapuru	North Syria context
<i>'A-si-[y]a</i>	'Aziya	Unidentified site in the Be'qaa (Ahituv 1984:73)
<i>Ha-ar-nam-ta</i>	Harnaim	Arnem – North Syria context
<i>Qi-ir-ta-'-n-bu</i>	Qiriath-'Anab	Sometimes equated with Tell Shihab but is a different sited in the region of Bashan (Aharoni 1979:170) as Yanoam is a more likely candidate for Tell Shihab
<i>Bi-ta-su-pi-r</i>	Beth-Sopher	An unknown city listed near Qiriath-Anab and thus considered to be in Bashan (Ahituv 1984:80)
<i>'A-du-ru-[n]a</i>	'Aduro[n]a	Bashan: the Hi-ni-a-na-bi and Aduru in the land of Gesher; EA 256.24,26. (Aharoni 1979:183)
<i>Si-di-pu-ta</i>	Sidipot	An unidentified city in the Bashan near Edre'i (Ahituv 1984:181)
<i>Ha-la-sa</i>	Hallas	Hellez on the border of Apa (Damascus) (Aharoni 1979:183; Ahituv 1984:112)
<i>'U-ps</i>	'Opa	Damascus (Ahituv 1984:193)
<i>Qi-y-na</i>	Qiyna	The Brook Qina (Aharoni 1979:183)

<i>Ra-ha-bu</i>	Rehob	Jordan Valley, identified Tell Sarhem (Ahituv 1984:164-165)
<i>Bi-y-ta-sa-'a-[al]</i>	Beth-shan	Jordan Valley, identified Tell-el-Husn (Ahituv 1984:79)
<i>Ta-ra-qa-'i-l</i>	Tarqa-El	Jordan Valley, an unidentified city close to Beth-shan (Ahituv 1984:189)
<i>Ya-ar-du-na</i>	fords of Jordan	Jordan Valley, probably the crossing point between Beth-shan and Pella (Ahituv 1984:123)
<i>Ma-k-ta</i>	Megiddo	(Ahituv 1984:139-140)

The journey of the scribe shows a route used by the Egyptian army throughout the 18th and 19th Dynasties. There are central communication and transportation routes through the Beth-shan gateway, across the Jordan Valley and up to the eastern highlands of Transjordan. Bashan and the Syrian Central Plateau were connected to the cities of the Jordan Valley by well-established routes. There was also a connecting route from Hazor and the other cities of the Huleh Basin around the Sea of Galilee into the northern half of the Jordan Valley. The fords of the Jordan River were not a formidable barrier to chariot traffic.

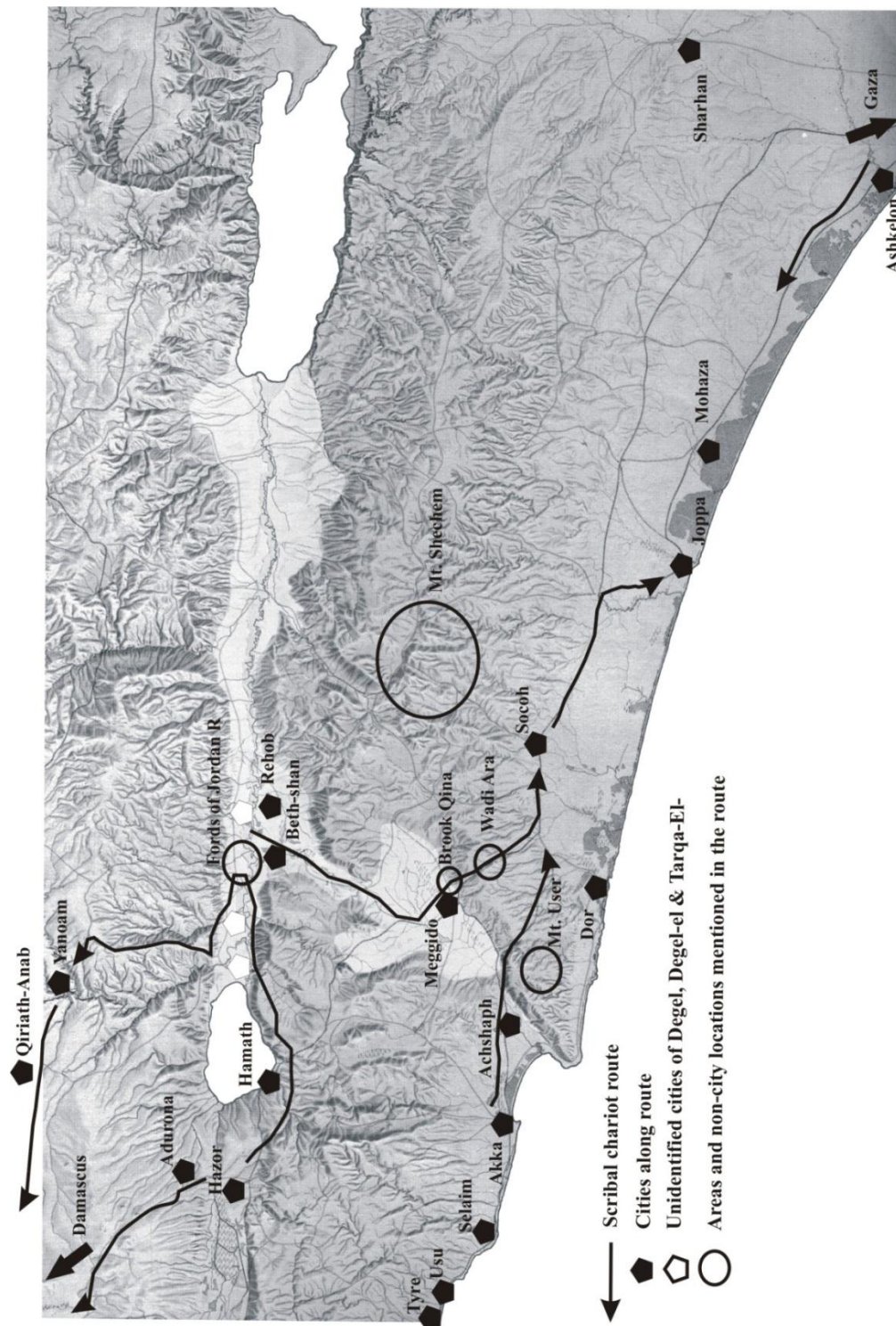


Figure 3.14: Route of the satirical scribe in Papyrus Anastasi I
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

3.2.2.5 Merneptah (1213-1203): Late Bronze Age III

Merneptah's Karnak inscription on the Cour de la Cachette Wall at the Temple of Karnak is the longest of the New Kingdom inscriptions. Although badly damaged in parts, there are some frames of pictures that may refer to Canaan. The surviving

texts describe the campaigns against the Libyans and Sea Peoples. Two stelae (one just a fragment) have also been discovered in the Karnak Temple describing the same campaign in year five of Mernetaḥ's reign (AEL 1976:73). The one complete stele contains a short poem describing military action in Canaan. Although the stele is carved in several lines in a straight text format, Anson Rainey's translation and diagramming of the poem into an eleven line stanza helps the modern reader to understand the structure and meaning.

- 1) *The Great Ones are prostrate, saying "Peace"*
- 2) *Not one raises his head among the Nine Bows;*
- 3) *Plundered is Thehenu, Khatti is at peace;*
- 4) *CANAAN is plundered with every evil;*
- 5) *Ashkelon is conquered;*
- 6) *Gezer is seized;*
- 7) *Yanoam is made non-existent;*
- 8) *Israel is laid waste, his seed is no more;*
- 9) *KHARU has become a widow because of Egypt;*
- 10) *All lands together are at peace;*
- 11) *Any who roamed have been subdued*

As the poem is diagrammed, the parallels of the structured lines are clear.

Line one is a general peace statement of victory.

Lines two and eleven refer to traditional and general enemies of Egypt.

Lines three and ten give the frontiers of Libya in the west and Hatti in the north.

Lines four and nine are established synonyms for Canaan.

Lines five through eight give the climax of specific victories.

(A. Rainey [2001] lecture notes, Jerusalem University College).

Although this stele is often called the 'Israel Stele', the main focus is on the defeat of the Libyan and Sea People forces. The Canaan campaign to the north is just a short addition to a much larger action to the west.

The Canaanite Campaign has two points of reference for our study. The first clear point is the reference to 'Yanoam being made non-existent'. We have already discussed the probable location of Yanoam as Tell Shihab along the Yarmuk River (location favoured by Rainey, Ahituv and myself (Ahituv 1984:199; section 2.3.1.2.1) or Tell El-'Abeidiyeh on the southern shore of the Sea of Galilee (favoured by Aharoni 1979:178). Either location has an Egyptian army campaigning beyond Beth-shan into the northern part of the Jordan Valley. Egyptian military movement crossing the Jordan Valley from Beth-shan towards Yanoam would have clearly been known by

Rehob, Hamath, Pehel and the other cities of the Jordan Valley. Although these Canaanite cities' relationship with Egypt is unknown, they would clearly know that the Egyptian forces could reach their own city walls with the same ease as Yanoam's forces. It can be safely assumed that the cities in between the mentioned campaign points of Gezer and Yanoam were under Egyptian control either before or as part of the campaign.

The second more ambiguous point of interest mentioned in the Canaanite Campaign poem, 'Israel is laid waste, his seed is no more' is: where is the location of Israel?

The Israel in the poem is not a city or geographic point. The hieroglyphic symbols between the cities of Ashkelon, Gezer and Yanoam are distinctly different from Israel.

Ashkelon, Gezer and Yanoam are each identified with the hieroglyphic determinative for a city-state—a throw stick plus three mountains designating a foreign country or city. Israel is marked by the determinatives sign used for foreign peoples: a throw stick plus a man and a woman over three vertical plural lines to signify nomadic groups or peoples without a fixed city-state, thus implying a semi-nomadic or rural status for Israel in Merneptah's Year 5.⁴³

Since Israel is listed as a distinct people group separate from the city-states mentioned, it is unlikely that Israel was present in the Jordan Valley or in the other lowlands of Canaan. It would be difficult to separate a single group of people living amongst established cities and their territories.

This places the group of Israel in either the western or eastern highlands of Canaan.

Rainey and Notley (2006:99) place Israel in the eastern highlands of Transjordan or even possibly on the floor of the eastern side of the Jordan Valley. In giving the

⁴³ That the Israel mentioned in the Merneptah stele refers to a group over a city or territory is no longer seriously questioned. Ahlstrom and Edelman (1985:59-61) are the most current scholars to hold to a specific territory or location argument.

Jordan Valley as a possible location of Merneptah's Israel, Rainey gives a caveat that the Jordan Valley was still populated by typical Late Bronze Age towns (Rainey & Notley 2006:99). However, no clear occupation strata have been found on the Plains of Moab for Late Bronze Age and Iron Age I periods (see 4.2.3.2–5). Rainey's argument is based simply on the assumption that the south to northeast order of the poem's city/people listings signifies a marching order for this campaign (Rainey & Notley 2006:99). Dever places Israel in the western highlands (Dever 2003:204-6. Na'aman (2005:197) argues that it is not necessary to read the list as a south to northeast marching order but that the marching order could be a circular route of going up the Coastal Highway (via Ashkelon and Gezer), into the Jordan Valley and eastern highlands (Ya'noam) and then looping around through the western highlands to totally encompass Canaan. Another option is that the text simply lists the cities first and then the group Israel (Finkelstein & Na'aman 1994:248). The text of Merneptah's stele does not give enough information for one location to be more probable than the other. The only clear conclusion from Merneptah's campaign is that Egyptian power in Canaan was being threatened, requiring a military campaign to reassert Egyptian influence, and that a group called Israel was enough of a force for Merneptah to brag about defeating. The group, Israel, was located on at least one side of the Jordan Valley in the highlands.

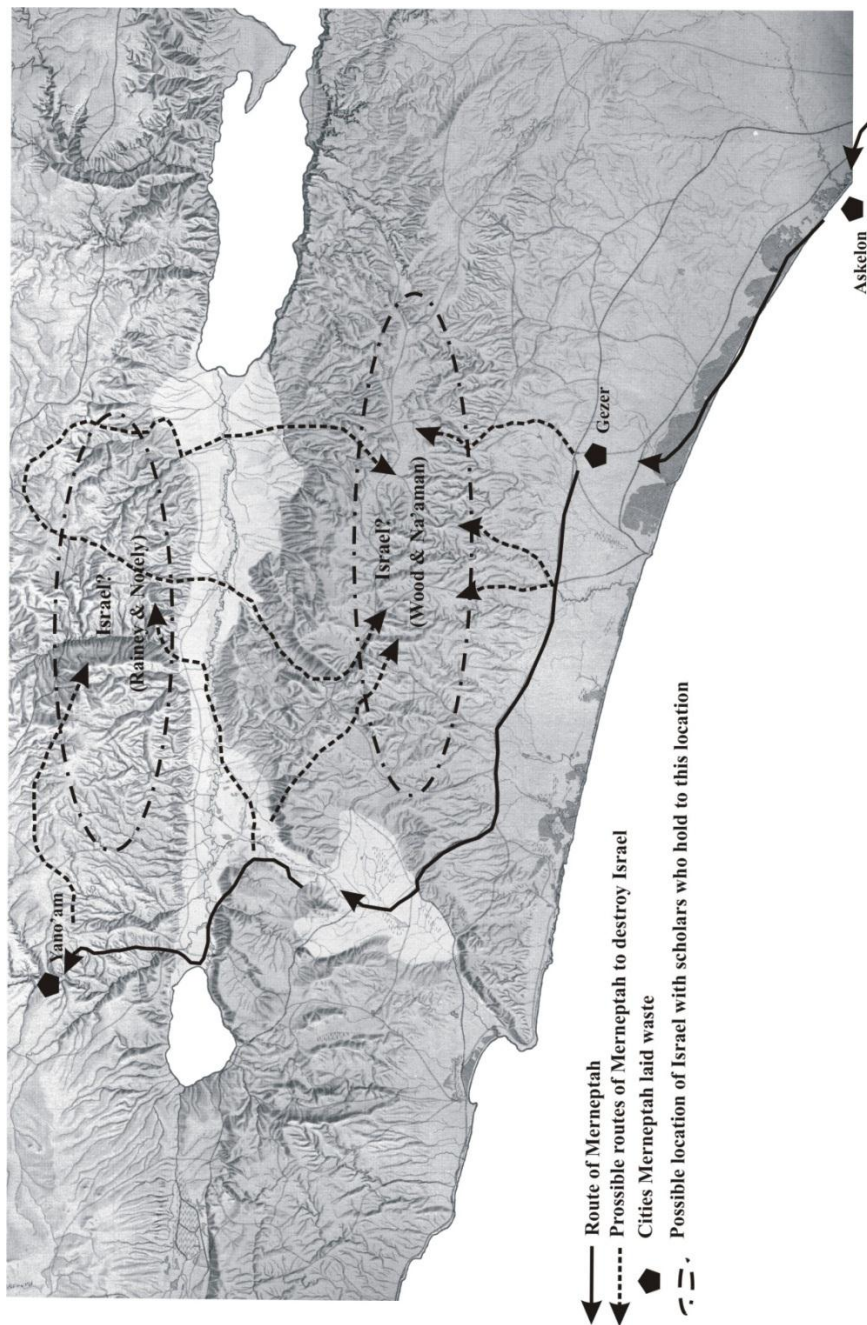


Figure 3.15: Merneptah's year eight campaign
 (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

There is a small school of disagreement over whether Merneptah actually exercised this campaign or not since it recounts his father's and Seti I's campaign routes to subdue Canaan. However, Ramesses II's campaign in Canaan was in his regnal year eight (1271/1270) and with his long reign till 1213, sixty-three years would have passed between his Canaanite campaign and Merneptah's year five campaign into Canaan. In the rebellious history of Canaanite cities, this is more than enough time for Ramesses II's power assertion to be forgotten and Egyptian authority to be

challenged. That the campaign route is similar to Ramesses II route is more likely a comment on strategic geography than on Pharaoh claiming the exploits of previous Pharaohs.

3.2.2.5.1 The Berlin pedestal: A new possible reference to Israel

The Merneptah stele containing the victory poem declaring 'Israel is laid waste, his seed is no more' (see 3.2.2.5) is usually referred to as the first extra-biblical reference to a group called Israel. However, a rediscovered granite pedestal in the Berlin Museum (item 21687) has a partial name ring that is gaining acceptance as the name of Israel. First published in German in 2001 and in English in 2011, Van der Veen, Görg and Theis present their reading of the three name rings on the granite slab as Ashkelon, Canaan and Israel (Van der Veen, Theis & Görg 2010:15-16). Although no geographical reference is made, the parallels with the Merneptah stele, the mention of a people called Israel and the use of the Biblical narratives in this paper make this piece worth mentioning. This pedestal fragment and a similar one (of the same size, stone and style containing three other name rings superimposed over three figures, two Western Asiatic and one Nubian prisoner, were purchased by the Berlin Museum in 1913 from an antiquities merchant by the name of Nachman. Out of situ and without further provenance of the pedestal piece, the date of the prisoner list mentioning Israel is uncertain. Above the three name rings are hieroglyphs reading 'one, who is falling on his feet ...' (Van der Veen, et al 2010:15). The first two ring names, Askelon and Gaza, are complete and differ slightly in their vowel markings and consonant groupings from the Merneptah stele. Görg identifies the spelling style of these names as parallel with 18th Dynasty writing (particularly during the reign of Amenhotep II) as opposed to those on the Merneptah stele at the close of the 19th Dynasty. Despite the writing styles, Görg suggests that the name list possibly dates to the reign of Ramesses II, primarily due to the Merneptah name parallels while Givon and Ahituv prefer an earlier 18th Dynasty date around the reigns of Amenhotep II or III due to the more archaic writing style (Van der Veen, et al 2010:15-17, 20). Two main issues surround the third name ring that makes the reading of the name Israel controversial. The first one is that it is incomplete. A little more than a third of the name ring was lost when the slab was broken before the

Berlin Museum acquired the piece. However, the size and comparison of the 'Israel' name ring to the other two name rings of the slab allow for a high degree of confidence of the completion and inclusion of all the hieroglyphs of the name ring (Van der Veen, et al 2010:16-17). The second more debatable question is the spelling of Israel. The second character is transliterated as *sh* rather than the Merneptah spelling which is transliterated as an 's'. This differential has led Hoffmeier to reject the reading of the name Israel (Van der Veen et al 2010:19). The authors make a strong case from other 18th and 19th Dynasty writings that the 'Egyptian *sh* sometimes does represent the Semitic *s* and the name Israel is the only known name that fits the characters represented' (Van der Veen et al 2010:20; cf. Van der Veen et al 2010:16-20).



Figure 3.16: The Berlin pedestal fragment
Slab no. 21687 of the Berlin Museum showing the three name rings of Ashkelon, Canaan and Israel (?) (left to right) (http://ia700308.us.archive.org/4/items/vanderveen_918/Jaei2-4VanDerVeenEtAl.pdf Accessed 26 February 2012).



Figure 3.17: Reconstruction of the Berlin pedestal name ring of 'Ishrael'

Size and comparison of the 'Israel' name ring to the other two name rings of the slab allow for a high degree of confidence of the completion and inclusion of all the hieroglyphs of the name ring. (http://ia700308.us.archive.org/4/items/vanderveen_918/Jaei2-4VanDerVeenEtAl.pdf Accessed 26 February 2012).

The reading of the name Israel appears to have a high degree of confidence. The dating of this reference to Israel in association with Ashkelon and Canaan is earlier than Merneptah's date, but by how much? A Ramesses II date brings forward a presence of Israel in Canaan by at least one generation. A date in the reign of Amenhotep II or III brings the presence forward almost 200 years in or before the Amarna period. The question regarding the relationship between this Israel and those mentioned in the Biblical narrative is still outstanding. This evidence does lend more weight towards including the Biblical narratives in this thesis for consideration of Late Bronze Age implications (cf. Van der Veen et al 2010:16-20).

3.2.2.6 Amenmesse (1203-1200), Seti II (1200-1194) and Siptah/Twosert (1194-1188): Late Bronze Age III

After Merneptah, the final four Pharaohs of the 19th Dynasty end with no known inscriptions of activity in Canaan. There is no meaningful involvement of Egypt in Syro-Palestine until Pharaoh Shoshenq of Dynasty XXII (945-924 BC). Only Twosert, the mother of Siptah who dominated her son and declared herself Pharaoh upon his death, continuing his regal years, has a record in Canaan. Twosert's historical presence is limited to her cartouche inscribed on an alabaster vase found in situ in the Late Bronze Age strata at Tell Deir Allah (Franken 1997:137-138). The most that can be derived from this evidence is that trade routes between Egypt and the Jordan Valley were still active.

3.2.2.7 Close of the 19th Dynasty and Late Bronze Age III

On a larger global scale, the reign of Merneptah, as well as in the final years of his father Ramesses II, is filled with concern for cereal shipments for the northern Levant (Singer 1999:714-716). Correspondence immediately after the peace treaty between Egypt and Hatti by Ramesses II are full of requests for Egyptian grain. Hatti, Mugish and Ugarit each seem to have had the same need (Singer 1999:714-716). That some kind of regional famine was affecting the southern Levant as well, is indicated by the following passage in Papyrus Anastasi VI from Merneptah's eighth year of reign:

We have completed the transfer of the Shasu tribes of 'Aduma past the fortress 'Merneptah-hotepher-Ma'at...' which is in Saku [=Succoth] to the pools of Per-Atum [=Pithom] of 'Merneptah-hotepher-Ma'at', which are in Saku, in order to keep them alive and in order to keep their cattle alive.

(P. Anastasi VI, lines 51-57 translated by Gardiner 1937:76-77)

The scribe Erinna greets his master, the treasury scribe Ka-ga[b...]. This is a dispatch for [my master's] information... to wit: we have finished admitting the shasu tribes of Edom [through] the fortress of Merneptah-hotpe-hi-ma'at which is [in] Tjekku to the water holes of the house of Atum-of-Merneptah-hotpe-hi-ma'at which [are in] Tjekku, for their own subsistence and to that of their flocks, by the great Ku of Pharaoh, the good sun of every land! In the year 8, epagomenal days, [birth of] Seth. I have had sent a columned document to the [place where] my master is with the other specific days on which the fortress may be passed (P. Anast. VI, 4:11-5:5; translated by Goedicke 1987:83-98).

At the end of Late Bronze Age and Dynasty XIX of Egypt, there seems to be a food crisis throughout the Levant including Canaan. Egypt appears to have responded with relief supplies to the north. Merneptah declares: 'It was to keep alive this land of Hatti that I caused grain to be taken in ships' (Kitchen 1969: 5 line 3). In the southern Levant, Egypt expressed at least a minimum act of charity by allowing the movement of the Shasu from Edom in the Transjordan through military checkpoints in search of sustenance. This food aid must have translated into some dominance of political and economic power along Egypt's traditional areas of influence, the coast and Sinai border areas of the period.

3.2.2.8 The 20th Dynasty and Ramesses III

Although the end of the 19th Dynasty is an easy stopping point for ending the Late Bronze Age and beginning the Iron Age in the southern Levant, a fixed date for the transition between these two periods, the Late Bronze Age and the Iron Age, is arbitrary as the differences between them were the result of a gradual process of change. The Great Harris Papyrus gives reference to Ramesses III settling various Sea Peoples, specifically the Sherden, in fortresses 'bound in his name' (Tubb 1988:106). This could help explain the presence of Egyptian and Egyptianized artifacts at Tell Sa'idiyeh (see 4.2.2.6).

3.2.3 'Apiru and Shasu

Throughout the New Kingdom texts, two distinct types or groups of people are mentioned in regards to Canaan. These two groups are the 'Apiru and Shasu. The Shasu and the 'Apiru appear together in Amenhotep II's booty list in Karnak. His prisoner list from Canaan includes, '127 princes of Retenu, 179 brothers of nobles, 3,600 'Apiru, 15,200 living Shasu, 36,300 Huru, 15,070 living Neges and 30,652 families' (Memphis Stele translated by Aharoni 1979:168 ANET 1955:255). These groups are referenced in areas surrounding the Central Jordan Valley but not in the valley itself.

3.2.3.1 The 'Apiru

Various records mention the presence of 'Apiru or ha-bi-ru and their involvement in the political dealings of the western highlands (EA 254, 287, 288, 289, 366), the eastern highlands in the Bashan (EA 207), the coastal plain (Gezer EA 290), the Galilee (Seti I stele lists 'the 'Apiru from Mount Yarmuta'), in the Northern Jordan Valley around Hazor (EA 148) and in the Jezreel Valley in the fields of Megiddo (EA 243). The only reference of 'Apiru being in the Central Jordan Valley is EA 274 where Queen IN-UR.MAH.MS, from her unknown city, is warning Pharaoh that the 'Apiru have taken Sabuma:

Say to the king, my lord, my god, my Sun: Message of NIN-UR.MAH. MEŠ, your handmaid, the dirt at your feet. I fall at the feet of the king, my lord, 7 times and 7 times. May the king, my lord, save his land from the power of the 'Apiru lest it be lost. Sapuma has been take(n). For the information of the king, my lord. (EA 274 translated by Moran [1992]).

Albright and Glueck identify Sabuma with the Biblical city of Zaphon and locate it in the Central Jordan Valley (Albright 1943:7-17; Glueck 1968:142).

In EA 273, the same queen of EA 274 warned that two other cities Ayyaluna (Aijalon) and Sarha (possible Zorah [Goren et al 2004:276]) have also fallen to the 'Apiru. The Queen also mentions that the 'two sons of Milkilu barely escaped being killed' (EA 273 translated by Moran [1992]). Were the two sons rulers of these two cities? It is unclear, but Ayyaluna is close to Gezer where Milkilu ruled. This paper has already shown a connection that Jerusalem had with both the Jordan Valley and Coastal

Plain. If the queen of EA 273 and 274 was located in the western highlands, she would be aware of activities in both these locations and certainly concerned about the growing activity of the 'Apiru. The identification of Sabuma with Zaphon in the Jordan Valley is not without challenge. Zadok (1986:180) suggests that Sabuma should be in the foothills near Gezer (see 2.3.1.2.2 and 3.2.1.9.6).

The 'Apiru are certainly not limited to southern Levant or the Late Bronze Age. 'Apiru are mentioned in Egyptian, Sumerian, Akkadian, Hittite, Mitanni and Ugaritic sources ranging from the 20th to 12th century BC. Geographically, they are referenced east of the Tigris, in Anatolia, in Cush as well as the Levant. 'Apiru is the West Semitic term for this social group. 'Apiru is equivalent to the Sumerian reflex, SA.GAZ. In the Amarna texts it is often shortened to GAZ (Merrill 1987:117). The 'Apiru in the southern Levant were usually described as anti-Egyptian factions during the Late Bronze Age. However, EA 195 reveals that some 'Apiru were accepted into the auxiliary units of the Egyptian military.

Much of the writing on the 'Apiru is focused on proving that the 'Apiru were not the Hebrews of the Old Testament (Rainey & Notley 2006:88-89). Current study of the root, form and semantics of the word 'Apiru and its various Sumerian logograms LU.SA.TAZ.(MES) has laid this argument to rest. Linguistically, it is impossible to show a link between the 'Apiru/'apir and the 'ibri/Hebrews.⁴⁴

The 'Apiru are described as a social class and not a tribal or ethnic group. The Tikonani Prism from Anatolia contains a name list of 438 'Apiru soldiers of King

⁴⁴ The early landmark detailed study of the 'Apiru is "The Hab/piru" by M. Greenberg 1955 and the French work edited by J. Bottero in *Le probleme des Habiru* from the conference of Societe Asiatique XII in 1954. Practically, all the academic writings identifying the 'Apiru and Hebrews as one group occur before the works of Greenberg and Bottero. As the 'Apiru became more defined in the 1960/70s, several schools supporting a 'revolting' or 'fleeing' peasant theory for the emergence of Israel arrived using the 'Apiru as the genesis of the Hebrews. Leaders of these schools are Mendenhall (1962, 1973) and Gottwald (1979).

Although a popular desire to find non-Biblical textual references for the emergence of Israel keeps interest in the 'Apiru alive, today's research has practically eliminated this direction of thought in academic circles. For a modern detailed study of the linguistic background on the word 'Apiru see Rainey's 1987 review of Loretz's *Habiru-Hebraer* (Rainey 1987).

Tunip-Tessup. The 'Apiru names are from many different groups: Semite, Hurrian, Iassite and other linguistic groups (Biggs 1999:294). The 'Apiru appear to be able to move across tribal and city/state identity.

'Apiru is a term used through the ancient sources to describe a military social class not associated with any tribe, state or linguistic association. Most often they are seen as anti-establishment brigands seeking the fortune for their own immediate group or for the highest bidder.

Although the argument of the 'Apiru being Hebrews is a closed argument in the negative, is it possible that elements of the Hebrews, such as Joshua's invading army in Old Testament accounts could be interpreted as 'Apiru? This question is outside the immediate scope of this thesis. However, the question relates to later Biblical sources used in seeing how the Jordan Valley references in the Old Testament matched up to the Egyptian record. Some scholars like Aharoni, Provan, Merrill and Na'aman agree that the 'Apiru are not Hebrews but that Hebrews could be considered 'Apiru. Therefore some references to the 'Apiru should be considered in examining the various conquest and infiltration models of the emergence of Israel (Aharoni 1979:176; Provan 2003:171; Merrill 1987:119; Na'aman 1986:275).

In summary, there is only one possible reference to the 'Apiru being in the Jordan Valley. The reference to Sabuma being taken by the 'Apiru in EA 274 fits in with the greater political context of 'Apiru activity in the western highlands. A case can be made in associating aspects of Hebrew military action as seen in the later Biblical texts with 'Apiru activity, thus showing a potential connection between the two groups of source material.

3.2.3.2 The Shasu

A type of people described as Shasu (in Egyptian sources) or Sutu (in cuneiform sources) appear in Egyptian literature from the 18th dynasty into the third intermediate period. The term is used primarily as a general title for a group(s) of people appearing as far north as the Be'qaa Valley (EA 195) and during Ramesses II Battle of Kadesh (Wilson 1927:278) and the Bashan (EA 122), as far south as the Sinai

along the eastern forts on the road to Gaza, the eastern Nile delta (Papyrus Anastasi VI, ANET 1955:259) and on the road to Meggido (Papyrus Anastasi I) as Kitchen translates: 'The desolation which the mighty arm of Pharaoh wrought among the foe belonging to the Shasu – from the fortress of Sillu to the Canaan' (1970:8-12). Their most frequent appearance in the 18th Dynasty suggests a concentration of Shasu in the Transjordan, in the area of Moab and Edom (Redford 1992:272-273; Dever 2003:28).

EA 195 and 122 describe the Shasu (Suteans) as mercenaries in service to Pharaoh's allies. However, most references to them describe them as semi-nomadic pastoralists:

We have completed the transfer of the Shasu tribes of 'Aduma past the fortress 'Merneptah-hotepher-Ma'at ... which is in Seku to the pools of Per-Atum of Merneptah-hotep-her-Ma'at ..., which are in Seku, in order to keep them alive and in order to keep their cattle alive (Papyrus Anastasi VI, ANET 1955 259).

'Aduma is identified as Edom and Seku is in the eastern Egyptian Delta similar to the Biblical land of Goshen (Rainey & Notley 2006:103). The above text is dated to a period shortly after Pharaoh Merneptah who mentions the Israelites in his victory stelae. It is noted then that the Shasu and Israelites were a different people. In a similar argument as in the 'Apiru, one can say that the Shasu are not Israelites, but the Israelites could be Shasu. A number of scholars hold this position (Givon 1971; Rainey 1991; 1995; Redford 1992: 272-280; Ahituv 1998; Killebrew 2005:154).

This argument is strengthened by the association of the Shasu with the place or deity name of Yahweh from the 15th century lists from Soleb and Amarah (Redford 1992:272; Givon 1971:26; Aling 2010).

In summary, no direct reference to the Shasu being in the Central Jordan Valley is known. However, a case could be made in associating aspects of Hebrew semi-nomadic pastoral society as seen in the later Biblical texts with Shasu activity in the surrounding regions. Further research into the possible connection of Merneptah's campaign that made 'Israel's seed no more' and the Shasu on neighboring panels of the western face of enclosure wall of the Cour de la Cachette at the Karnak temple

would be interesting to determine if Israel was indeed considered Shasu by the Egyptians (Rainey & Notley 2006:99-100). This connection is worthy of a separate study. It is relevant to mention the Shasu in this paper as it adds some weight to including the later Biblical record of Hebrew activity in the Jordan Valley into this study. With a Shasu homeland or concentration in Edom during the 15th century, they were situated with natural trade routes north to Bashan and Damascus, northwest through the coast via the Jordan and Jezreel Valleys and southwest to Egypt.

The growth in the number of settlements and the overall population of Canaan, including the Jordan Valley during the Late Bronze Age, has to take into account the integration of both 'Apiru and Shasu (Gonen 1984:61-73; Rainey 1995:490-496). Although specific ethnicity is very difficult to determine via archaeological methods and the artifacts left by nomads are difficult to find, various models derived from historical records such as Egyptian prisoner lists estimate the Late Bronze Age population of Canaan could have been made up of 10-15% of transitory groups such as the 'Apiru and Shasu (Finkelstein 1994:233-234). Most theories on the emergence of Israel from a military conquest (Albright), a social revolution (Mendenhall), a peaceful infiltration (Noth, Aharoni, Rainey), a mixed multitude (Killebrew) and a pastoral Canaanite movement (Finkelstein 1990), interpret the 'Apiru and Shasu as key players. Although neither the 'Apiru or Shasu are directly mentioned (outside of the 'Apiru in EA 274) in the Egyptian literature, their presence in the western and eastern highlands most surely gave them interaction with the valley and its population.

The following chart (Figure 3.18) is an attempt to visually summarize the Egyptian 18th and 19th Dynasties' movements towards and through the Jordan Valley. The three columns moving left to right (west to east) represent the three geographic zones of the coastal plain, the Jordan Valley and the eastern highlands. The list of individual Pharaohs and the general dates of their reigns provide a time line on the far left side of the figure. Grey bars moving horizontally west to east from the individual Pharaohs, represent eastern movement and presence in that geographic zone that is directly mentioned or strongly inferred by the sources reviewed in this

chapter. Significant points of conflict, people or unique sources are inside their appropriate geographic zone and time frame.

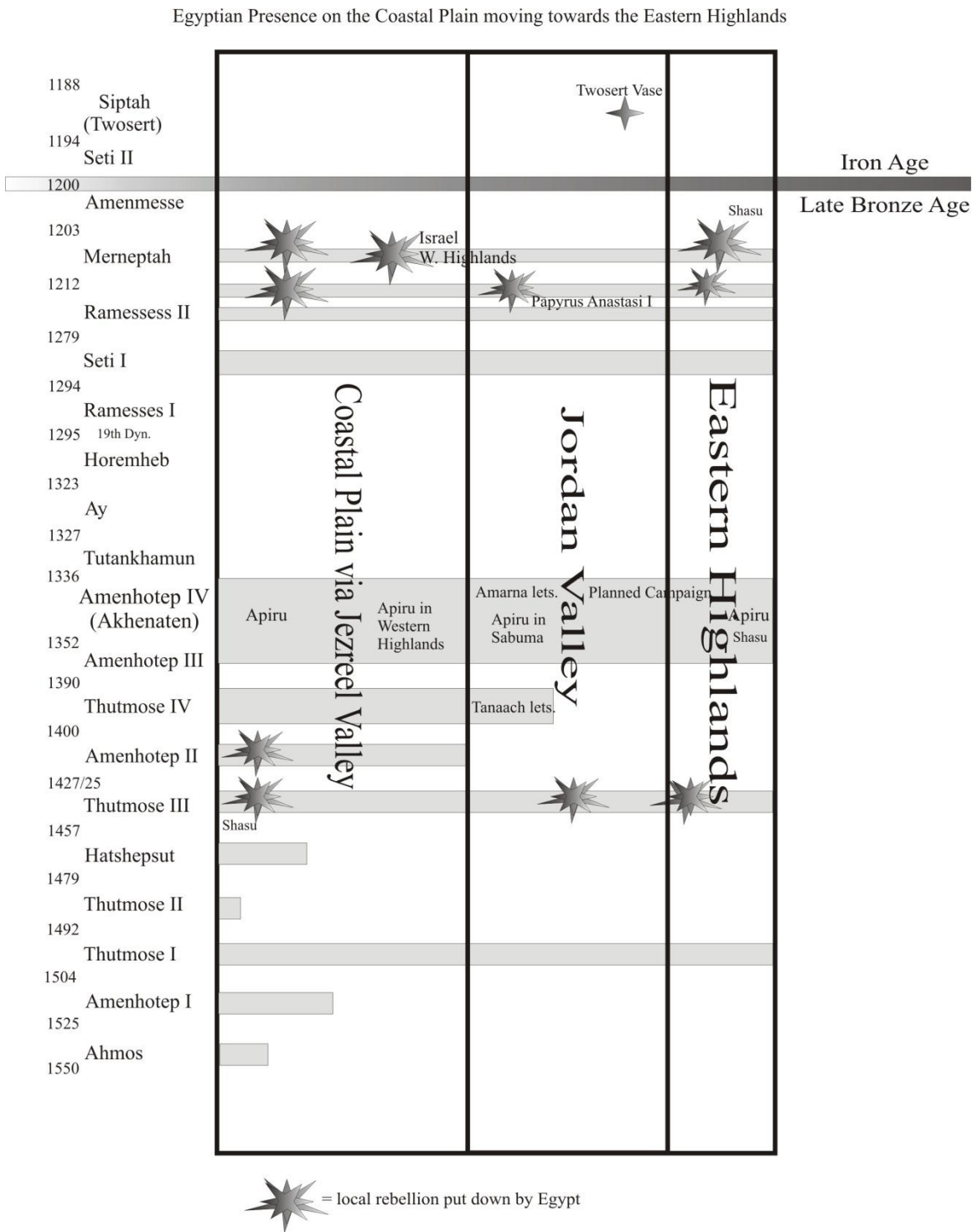


Figure 3.18: Egyptian movement from the Coastal Plain eastward during the Late Bronze Age (Schaaf 2010)

3.3 Biblical record

3.3.1 Use of the Biblical record

This chapter continues reviewing the historical documents relating to the Jordan Valley by now examining the running narrative of the Bible from the end of Numbers, Joshua, Judges, Ruth and Samuel for references to the Jordan Valley. This narrative tells the story of the Hebrew generations upon their first contact with the Jordan Valley after the Exodus account to the dawn of the Israelite monarchy. A running narrative is a continuous story line crossing over the Biblical book boundaries, long periods of time and even different authors. The advancing storyline of Exodus to Numbers is interrupted by detailed explanations of the Law while the people are camped at Mount Sinai. The narrative continues through the Sinai wilderness and their arrival at the Plains of Moab. It is again interrupted by three detailed sermons of Moses reteaching the Law in the Book of Deuteronomy. The *Heilsgeschichte* story continues to develop chronologically with the accounts of Joshua, Judges and I Samuel. There are occasional points of backtracking or repeating different events from a different angle (Judges 1 describes the physical battles of the land versus Judges 2 which describes the cultural battle of the immediate generations after Joshua) or a detailed individual story that fits into the time of the grand story line (the Book of Ruth). Without considering the historical content of the Biblical narratives, the story of the Jordan Valley in this period is only an Egyptian story.

3.3.2 Specific dating of conquest and Judges events (theoretical)

After assuming the running narrative story-line of the generations before I Kings 6:1, an early or late conquest date is to be considered. A late conquest narrative model starts in the last half of the 13th century, placing the events of Numbers, Joshua and Judges 2 during the reigns of Ramesses II and Merneptah (1279-1203). Subsequent events would all fall into the Iron Age and outside the scope of this study. Following the late conquest narrative model would exclude the need to examine the vast majority of the Biblical narrative in our examination of the Late Bronze Age. In order

to examine the Bible's running narrative to add to the Egyptian material an early conquest model will be assumed.

An early conquest model starts at the end of the 15th century. This allows for the inclusion and examinations of more of the narrative story for information relating to the Central Jordan Valley during the Late Bronze Age.

Within the early conquest to monarchy school, there are numerous models for dating specific events.⁴⁵ None offer a conclusive argument. In general, individual events between the various models of early conquest to monarchy schools vary by around 25 years between them. At this time of research, the author thinks it is dangerous to list specific dates for events of the early narrative. However, at the risk of raising arguments outside the scope of this survey, the table below shows examples of dating schemes from three established proponents of the early conquest model. None of these authors are dogmatic on exact years as each call for an overlapping of some local judges which are not provided in their tables. The author includes the table simply to provide some chronological reference points of the early conquest biblical record that can be used as a starting point, to enable the maximum amount of the biblical storyline to be included in this chapter.

⁴⁵ For a quick reference to the various positions of authorship and dating of Judges as well as internal chronologies, see the charts and tables in the Word Biblical Commentary by Trent Butler (Butler 2009).

Table 3.9: Samples of the dating of the Judges in early conquest models (Schaaf 2010)

	Merrill (1987, Chapter 4)	Steinmann's calculations (Butler, 2009:489)	Keil & Delitzsch, (1970:289)
Conquest Transjordan	1406	1406-1400	1452-1445
Othniel	1310	1371-1332	1427-1387
Ehud	1300-1275	1315-1226	1369-1289
Shamgar	1230	1315-1226	-
Deborah	1240-1220	1217-1178	1269-1229
Gideon	1190-1180	1172-1133	1222-1182
Abimelech	1180-1140	1133-1131	1182-1179
Tola	1117-1094	1131-1109	1179-1156
Jair in Gilead	1115-1093 or 1094-1072	1109-1088	1156-1134
Jephthah	1106-1100	1088-1083	1116-1110
Samson	1124-1084	1049-1030	1116-11096
Samuel	1084-	1060-	1114

The following two charts illustrate the movements of people across the Central Jordan Valley according to the Biblical narrative. As in Figure 3.18 summarizing the Egyptian movement across the three geographic zones of the southern Levant, Figures 3.19 and 3.20 are correlated with the time line of the Egyptian Pharaohs on the left hand side. An oval representing the western highlands has been added to the geographic zone of the coastal plain to differentiate between the Egyptian movement from the coastal plain east via the Jezreel Valley. The individual grey bars beginning in either the eastern or western highlands and moving into or through the Jordan Valley are labeled by the central character or people group mentioned in the Biblical narrative. The individual event bars are not to be read as a fixed date but rather as a sliding scale (up or down the time line. plus or minus 25 years) as Figure 3.19 is an attempt to visualize the potential movements relating to the Jordan Valley

in the various dating models of Joshua and Judges put forth in Table 3.9. Figure 3.19 is a general model for the Early Conquest and includes the two internal date markers from the narratives themselves in the right hand margin (see 1.5.2.1.3). Figure 3.20 follows a Late Conquest model where all but one of the events is compressed into the early Iron Age and is therefore outside the scope of this study.

An Early Conquest Model Illustrating Movement Across the Jordan Valley

Most late 15th century conquest models would follow this pattern with individual events sliding plus or minus 25 years in chronology (Keil & Delitzsh, Steinmann and Merrill).

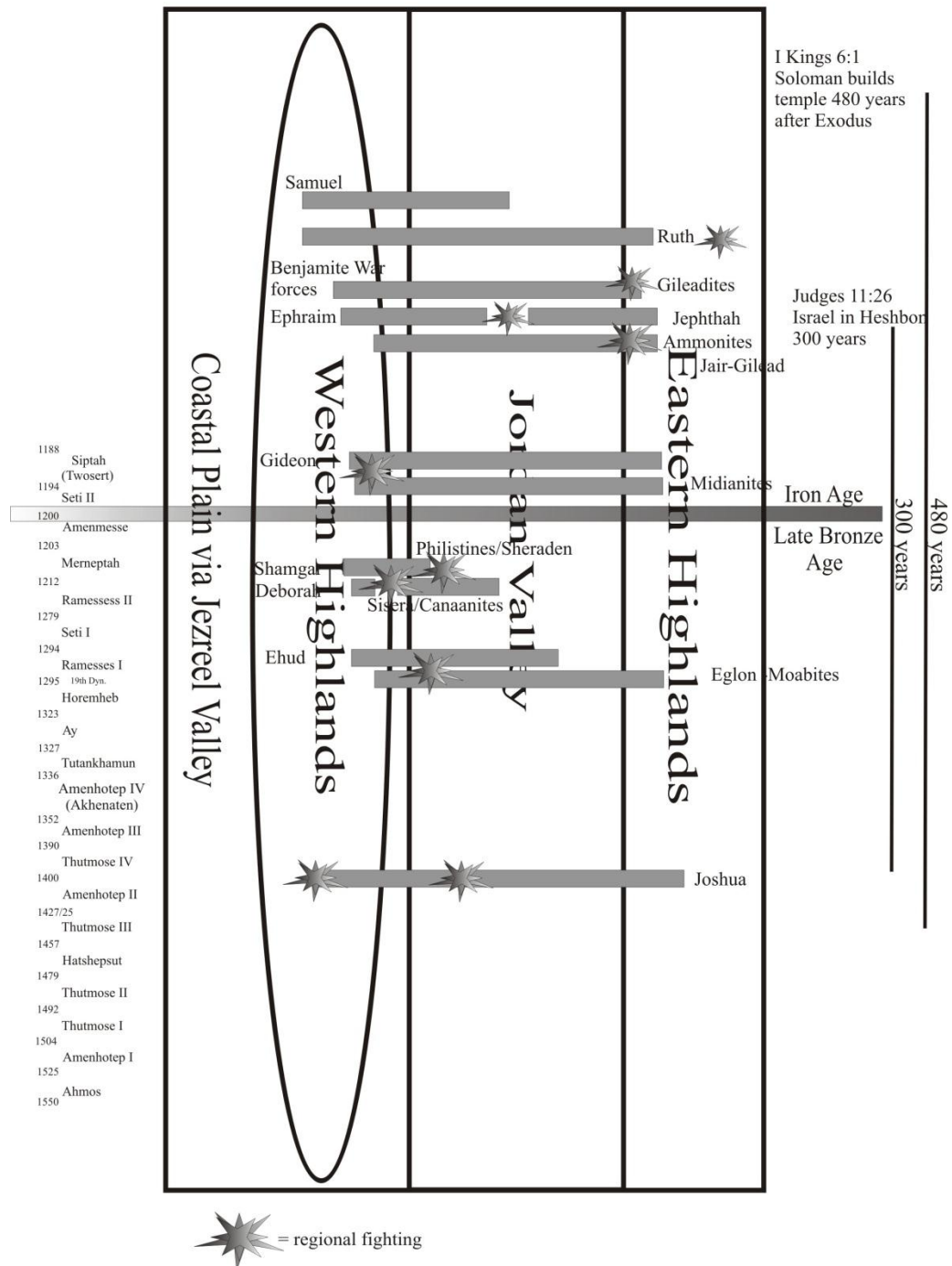


Figure 3.19: Biblical movements from the eastern and western highlands in an early conquest model (Schaaf 2010)

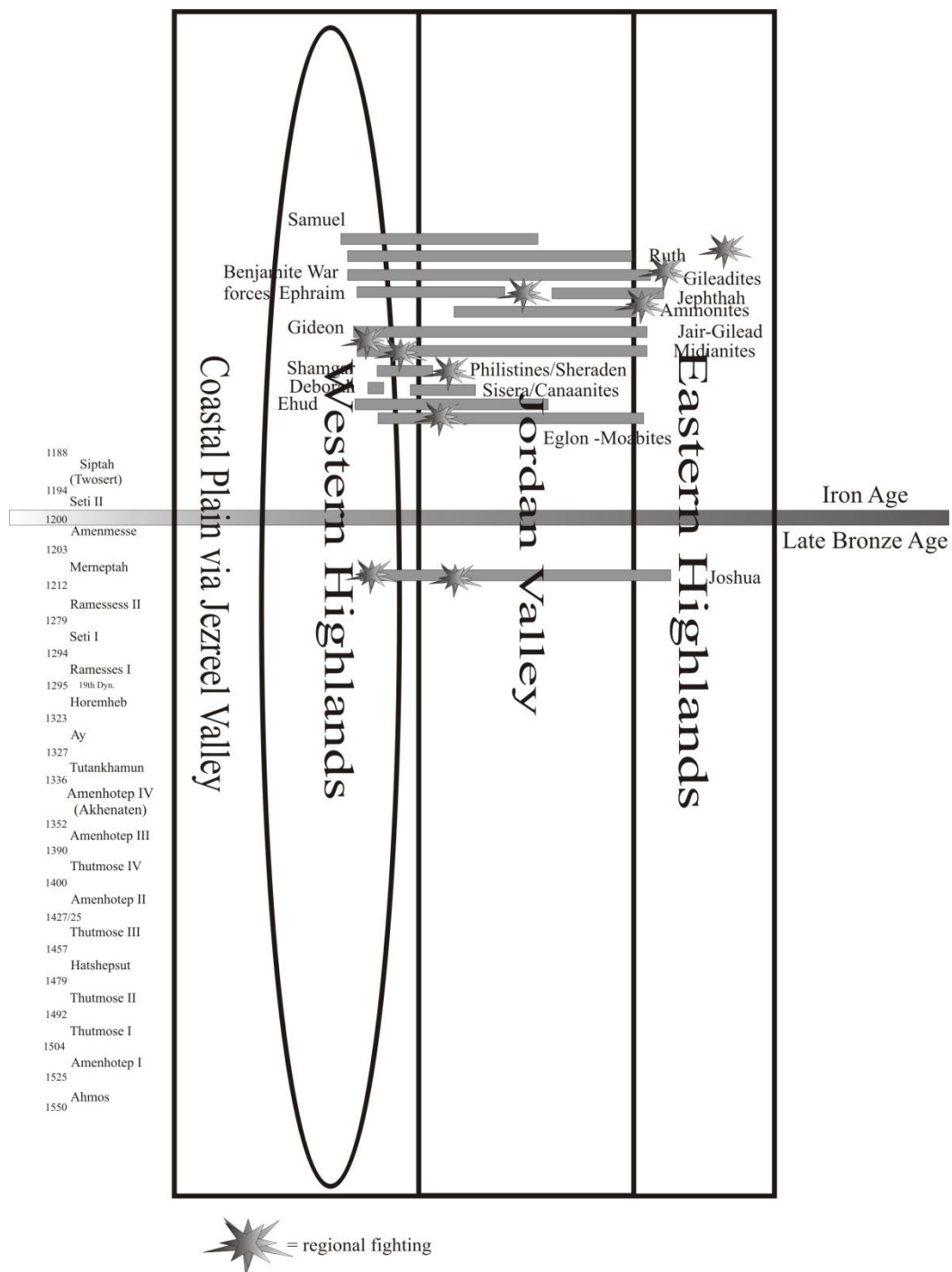


Figure 3.20: Biblical movements from the eastern and western highlands in a late conquest model (Schaaf 2010)

In the following sections individual biblical accounts will be examined for possible geographical, political and social elements or references relating to the Jordan Valley. External archaeological issues will be addressed in Chapter 4 of this thesis. The biblical books of Exodus, Numbers and Joshua provide a continuous narrative of the twelve tribes leaving Egypt and entering the Land of Canaan. Leviticus and

Deuteronomy are integrated into the progressive narrative but are detailed books of instruction written while the people were stopped along the route of their sojourn (Leviticus at Mt. Sinai and Deuteronomy on the Plains of Moab).

3.3.3 The Book of Numbers

The first entry of post Exodus Israelites into Canaan is from Kadesh-Barnea is recorded in Numbers 13. The only information given regarding the Jordan Valley is in verse 29: ‘...the Canaanites are living by the sea and by the side of the Jordan’. The report makes a distinction between the Canaanites living in the lowlands and the various tribes of the Hittites, Jebusites and Amorites living in the hill country (Numbers 13:29). After the wandering in the wilderness, Numbers 21 relates the Trans-Jordan conquest of the eastern highlands from the Arnon to Bashan with the defeats of Sihon and Og (Numbers 21 and Deuteronomy 2:24-3:11). After the Trans-Jordan campaign, the twelve tribes descended into the Jordan Valley and set up camp on the Plains of Moab, ‘Then the sons of Israel journeyed, and camped in the plains of Moab beyond the Jordan opposite Jericho’ (Numbers 22:1).

While the twelve tribes were camped on the plains of Moab, the leaders of Moab and Midian hired a diviner to come and curse the sons of Israel (Numbers 22). The diviner is called ‘Balaam the son of Beor, at Pethor, which is near the river, in the land of the sons of his people ...’ (Numbers 22:5).

There are two main schools identifying Balaam’s homeland. One identifies Balaam as an Aramean, a literal extraction of Numbers 23:7, ‘From Aram did Balak import me, the king of Moab – from the mountains of Qedem’. The second associates Balaam with Edom. This extrapolation is primarily based on emending Aram to Edom in Numbers 23:7. The basis for emending the text comes from the list of Edomite kings given in Genesis 36:32. Genesis 36 lists a king by the name of ‘Bela the son of Beor’. The resemblance of the names Balaam and Bela, both bearing a father by the name of Beor, makes a tempting argument that Balaam and Bela are the same person or possibly brothers. This argument that Bela and Balaam refer to the same person is weak. The Bela of Genesis 36 is a strong king who opposed Moses and lived in Dinhaba. Balaam is a prophet for hire and lived in Pethor. To make them brothers is

easier but simply having a father by the same name is not a strong basis to emend Aram to Edom in Numbers 23 (Noth 1968:174; Allen 1973:145, 149-165; Elwell 1988 s.v. 'Balaam'). Three texts help locate Pethor adding weight to the argument that Balaam was from Mesopotamia. Numbers quotes Balaam himself saying, 'From Aram Balak has brought me, Moab's king from the mountains of the east' (Numbers 23:7). The Assyrian record of Shalmaneser III (859-824 BC) describes Pethor (identified as Pi-it/tiru) as located on the Sajur River when Shalmaneser commemorated the victory and settlement of the city by Tiglathpileser I (1116-1077 BC) (Elwell 1988 s.v. 'Pethor'; ANET 1955:278). In the annals of Pharaoh Thutmose III, Pethor is identified with the Pedru(i) of the geographical lists of Thutmose III (Orr 1999). Albright places Pethor in the land of 'Amaw on the Sajur River near where it joins the Euphrates (Albright 1950:15-16). No clear site has been identified as Pethor. One contender that fits the general area is Tell Ahmar 96 kilometers (60 miles) north east of Aleppo, Syria (Snaith 1967:287). This places Pethor around 650 kilometers (400 miles) from the Plains of Moab. This is textual evidence for the transport and communication routes existing between the east side of the Jordan Valley and highlands with the central Syrian plateau. Culturally, the leaders of Moab and Midian were aware of, respectful of and able to hire religious figures of their northern neighbors.

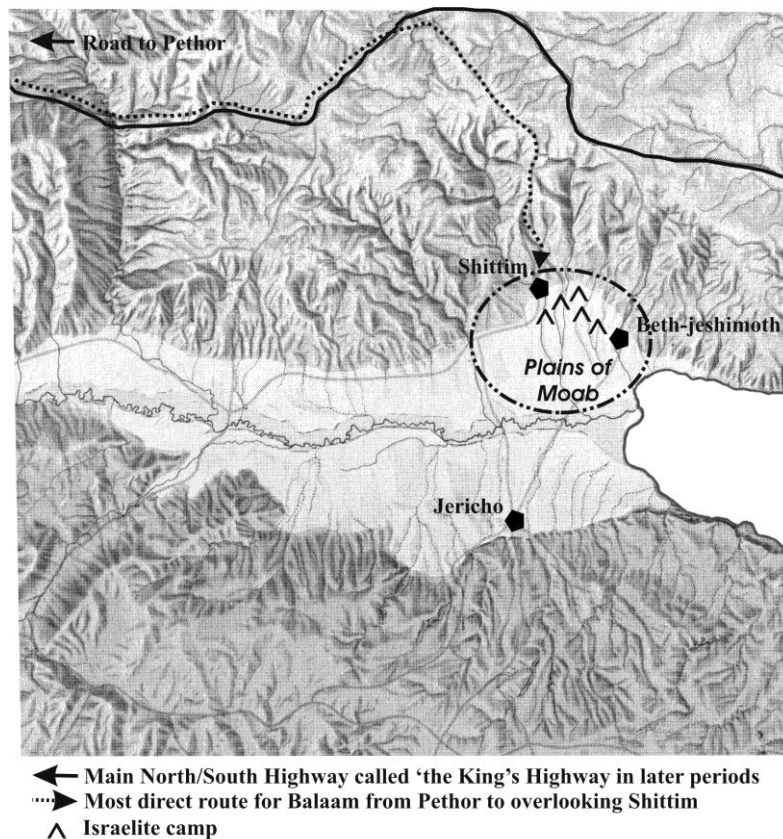


Figure 3.21: Israelites on the Plains of Moab and Balaam

The Israelites camped on the Plains of Moab across from Jericho. Canaanites were living along the Jordan River. The Kings of Moab hired Balaam from Pethor, 400 kilometers to the north in Aram (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

According to the Biblical narrative, the main Israelite base on the Plains of Moab was Shittim (2.3.1.2.3 for identifying possible sites of Shittim). The people camped here for some time, mixing with the Moabites and Midianites socially and religiously (Numbers 25). Several administrative activities took place at Shittim: the tribes took a census (Numbers 26), transferred leadership from Moses to Joshua (Numbers 27:18-23), divided the Trans-Jordan territories between the tribes of Reuben, Gad and Manasseh (Numbers 32), and sent spies across the river to the west (Joshua 2:1-8).

According to Numbers 25, the Israelites began to intermingle with the Moabites and participate in their religious activities of Baal worship. Numbers 21:29 and the Mesha stele name the main deity of the Moabites as Chemosh. Although both the Israelites and Moabites had their own central deity, each appears to easily embrace and participate in the predominant religious system of Canaan – the worship of Baal. Numbers 25 also makes reference to a plague that killed a large number of people (verse 9). If one accepts an early date for Israel's arrival, a correlation of this plague

with a larger regional plague that rampaged across the region for twenty plus years during the mid to late 14th century as described in both the Amarna letters and the Hittite plague prayers of Mursilis, could be suggested (Aharoni 1979:210; ANET 1955:394-95). Although a bit tenuous, it would be another thread of evidence weaving the Jordan Valley into the wider fabric of the greater region.

Numbers also gives insights into the social structure of Israel, Moab and Midian. It narrates that Israel is organized along tribal clans with one key tribal leader blessed by God and supported by a hierarchy of male leaders along family lines with a special class of judges in a priestly clan (Numbers 1-3, 11-13; 17-18; 25). Moab had an established king supported by elders (Numbers 21:26; 22:2). Midian appears to be organized more along tribal lines like Israel rather than a kingdom like Moab (Numbers 22:4). The king of Moab (Balak) interacted with the elders of Midian with no mention of a central Midianite leader. This is evidenced by Balak, the Moabite king, who sent his elders together with the Midianite decision-making elders on the journey to meet with Balaam (Numbers 22:1-7). The other peoples mentioned in the Transjordanian campaigns, Ammon and Bashan, each have a named king, Sihon and Og respectively (Numbers 21:10-35). Midian seems to be more akin to Israel in structure than the established kingdoms of Moab, Ammon and Bashan. These three groups not only have individually named kings, but named cities which were defeated by Israel. Only in the detailed campaign against Midian in Numbers 31 are five leaders (called kings) of Midian mentioned along with all their camps (Numbers 31:10).

In the Egyptian records, there are no clear eastern boundaries for the land called Canaan. In Numbers 34, the sons of Israel considered the Jordan River, between the Sea of Galilee (Chinnereth) and the Dead Sea (Salt Sea), a clear physical boundary marker (Numbers 34:2-12; 35:10, 14). The land west of the river was considered Canaan and the lands east of the river were simply referred to as the east or by their tribal or kingdom names or geographic description (see 2.2.1).

The books of Numbers, Deuteronomy and Joshua each review the Trans-Jordan campaign of the Israelites and the subsequent division of the land between the three

tribes of Reuben, Gad and Manasseh (Numbers 34:13-15, Deuteronomy 2:24-3:17, Joshua 13:8-33). Most of the cities in the Deuteronomy and Joshua accounts were either not named or their location is not known at this time. Combining the geographical references and identified sites, one can generally map out the tribal areas (see 3.3.4.1; Figure 3.25; Table 3.10). Most of the sites are in the eastern highlands and outside the scope of this study. What is pertinent to this study is that these boundaries from the eastern highlands ran west down into the Jordan Valley with the Jordan River marking their western borders. This relates to several key points. One key point is that it confirms that communication and transportation routes clearly traveled east-west along regional routes to the extent of maintaining some kind of local political integrity. These east-west routes connected with the north-south international trade route of the eastern highlands. Political entities such as Bashan and Gilead had territorial interests that ranged from the Jordan Valley to the highlands and, in the case of Bashan, overlapped onto the Syrian plateau. These same connections appear in the Egyptian records.⁴⁶

The geographical details and significant site locations of the Trans-Jordan campaigns are covered in Chapter 2 (see 2.2.1 and 2.3.1.1.). The historical geographical movements are illustrated in the following maps.

⁴⁶ The campaigns of Thutmose III see 3.2.1.4; Seti I see 3.2.2.2; Ramesses II see 3.2.2.3; Papyrus Anastasi I see 3.2.2.4 and EA 255 see 3.2.1.9.3

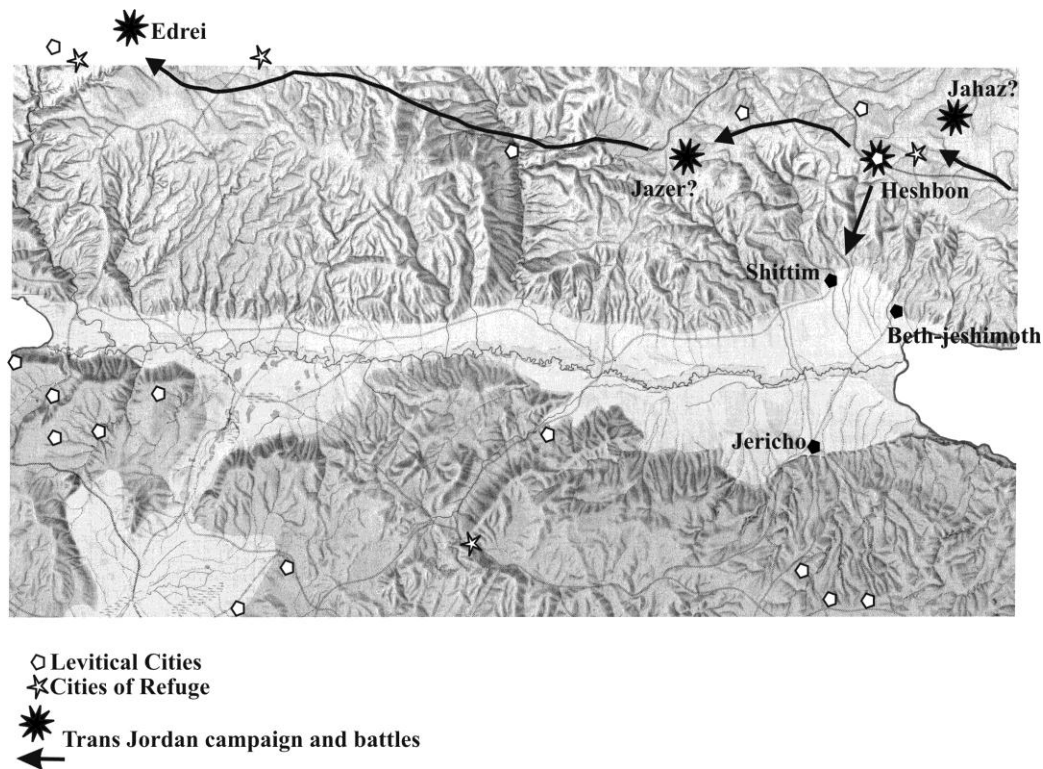


Figure 3.22: The Trans-Jordan campaign of Numbers 21 and the distribution of Levitical cities and Cities of Refuge. The distribution of the Levitical and Refuge Cities are evenly disbursed between the east and west highlands in an apparent attempt to balance and unify the eastern and western highlands (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Further evidence of the Jordan Valley connecting the eastern and western highlands from the settlement of Israelite tribes, is the placement of the Levitical cities in Numbers 35: 'When you cross the Jordan into the land of Canaan,... you shall give three cities across the Jordan and three cities in the land of Canaan; they are to be cities of refuge' (Numbers 35:10-14). Although the Jordan Valley presents a political and social division that challenges the unity of the region, the Levitical cities' placement and the tribal responsibilities of Reuben and Gad to continue in the Cis-Jordan conquest demonstrate thoughtful attempts to unify the western and eastern highlands across the valley (Joshua 1:12-18).

3.3.4 The Book of Joshua

The book of Joshua opens with the challenge/reminder that the tribes that have settled on the eastern side of the Jordan River are to participate in the conquest of Canaan (Joshua 1:12-18). While the tribes are still camped at Shittim across the Jordan, two spies are sent across the river with a special emphasis to examine Jericho:

And Joshua the son of Nun sent two men secretly from Shittim as spies, saying, "Go, view the land, especially Jericho." And they went and came into the house of a prostitute whose name was Rahab and lodged there. And it was told to the king of Jericho, "Behold, men of Israel have come here tonight to search out the land..." But she had brought them up to the roof and hid them with the stalks of flax that she had laid in order on the roof. So the men pursued after them on the way to the Jordan as far as the fords....

Before the men lay down, she came up to them on the roof and said to the men, "I know that the LORD has given you the land, and that the fear of you has fallen upon us, and that all the inhabitants of the land melt away before you. For we have heard how the LORD dried up the water of the Red Sea before you when you came out of Egypt, and what you did to the two kings of the Amorites who were beyond the Jordan, to Sihon and Og, whom you devoted to destruction. And as soon as we heard it, our hearts melted, and there was no spirit left in any man because of you (Joshua 2:1-11).

The spies must not have been too stealthy as both the municipal authorities and the local brothel were aware of their general presence (Joshua 2:2-3). Geographically, this account reveals that:

- 1) the inhabitants of Jericho were aware of the movements and events of the Israelites from the Sinai, through the highlands of Edom and Moab, and through the highlands of Amman (Sihon) and Bashan (Og) (Joshua 2:10). Communication as far as southern Jordan in the highlands southeast of the Dead Sea was flowing in a consistent and timely fashion.
- 2) there is a recorded reference to the regional road going east from Jericho, across the fords of the river Jordan and then presumed to continue east (Joshua 2:7, 22).
- 3) there is a reference to flax being dried on Rahab's roof (Joshua 2:6). This provides an idea of some of the agricultural activities consistent with what would be expected as well as the time of year. The flax harvest occurs in April, soon after the late or spring rains when the Jordan River would have been at a high level (Davies 1917:824).

Shortly after the return of the spies to Shittim during the spring time (the Jordan was at flood stage, Joshua 3:15), the Israelites crossed the Jordan River and made camp

at Gilgal. The crossing was between Shittim and Jericho some distance south of the cities Adam and Zarethan (Joshua 3). The references to the cities of Adam and Zarethan are simply northern geographic points and are covered in section 2.3.1.2.2.

After successfully crossing the river, the author of Joshua appears to lump the various established tribes of the west, the Canaanite, the Hittite, the Hivite, the Perizzite, the Girgashite, the Amorite and the Jebusite (Joshua 3:10), into two groups, the Amorites and Canaanites (Joshua 5:1). The description of the two groups 'when all the kings of the Amorites who were beyond the Jordan to the west, and all the kings of the Canaanites who were by the sea' (Joshua 5:1), appears to be consistent with other historical and archaeological records placing the Canaanites in the lowlands, in this case, all the way out to the coastal plain (Keil & Delitzsch 2002: Joshua 2:39 and Jamieson, Fausset & Brown 1871: Joshua 5:1).

After crossing the Jordan River, the Israelites set up camp at Gilgal just east of Jericho (Joshua 4:19)(See 2.3.1.2.3). Gilgal was the Israelite chief base of military and political operations throughout the conquest of the western highlands (Joshua 9:6; 10:6-9, 15, 43; 14:6). It remained a central gathering point for religious and civil purposes throughout the period of Judges (Joshua 4:20; 5:10; Judges 2:1; 1 Samuel 7:16). Israel's first king was crowned at Gilgal (I Samuel 11:15). Gilgal's strategic nature in the Southern Jordan Valley provided quick access to the western highlands (Joshua 10:7) as well as the southern fords across the Jordan River and the eastern highlands (I Samuel 13:7). King Eglon of Moab used Gilgal as a base for governance over the Israelites immediately before the time of the judge Ehud (Judges 3:19). Gilgal remained a key location in the life of the Israelites in the later periods of the United and Divided Kingdoms, not only for its strategic location but as a social and religious barometer of the nation (2 Kings 4:38; Hosea 4:15; 9:15; Amos 4:4).

The first military action of the Israelites in the Jordan Valley was against Jericho. The archaeological excavations of Jericho are reviewed in section 4.2.3.1. The purpose of this section is not to critique the events of the story but to glean the historical geographical details listed in the Biblical account. Putting aside the theological and miraculous elements, the Canaanite city fell to the Israelite forces and quantities of

silver, gold, bronze instruments and iron were taken as plunder (Joshua 6:19, 24). One individual, Achan, was singled out for keeping booty for himself and not turning it over to the collective treasury. Besides the silver and gold, his cache contained a 'beautiful mantle from Shinar' (Joshua 7:21). Shinar is consistently described in the Bible as an area in Mesopotamia ranging from modern Baghdad to the Persian Gulf. The Plain of Shinar included the cities of Babylon, Erech and Accad (Genesis 10:10). The Tower of Babel is said to have been built on 'a plain in the land of Shinar' (Genesis 11:2). During the Divided Kingdom period, Shinar was equated with Babylon (Isaiah 11:11) and Nebuchadnezzar took 'Jehoiakim king of Judah ... with some of the vessels of the house of God; and he brought them to the land of Shinar, the house of his god' (Daniel 1:1, 2). In the Egyptian sources of the 15th century BC, Ran Zadok equated the 'Sngr' with the cuneiform 'Samharu' for the term Shinar. The Samharu were a Kassite tribe who ruled Babylon during the 15th century BC. Zadok (1984:240-244) argues that 'west of the Euphrates the name of this well-known Kassite tribe became synonymous with the region. Much like the Greeks who called themselves "Hellenes," but the Romans referred to them as "Graeci" or "Grai" after a Hellene tribal name for homeland' (ABD 1996 s.v. 'Shinar'). This historical record correlates with the archaeological evidence of distant trade routes connecting to the Levant.

Achan is executed and buried in the Valley of Achor (Joshua 7:24-26). The Valley of Achor also became part of the northern boundary for the tribe of Judah (Joshua 15:7). The valley was most probably modern el-Buqei'ah just east of Wadi ez-Zaraniq between Jericho and the north end of the Dead Sea (Farmer 1957:34-36; Achtemeier 1985:9).

After the fall of Jericho and the ascent to Ai (probably near or parallel with today's route Hwy 449), Joshua's southern campaign of conquest was restricted to the southern highlands and Shephelah as well as parts of the Negev (Joshua 7-10).

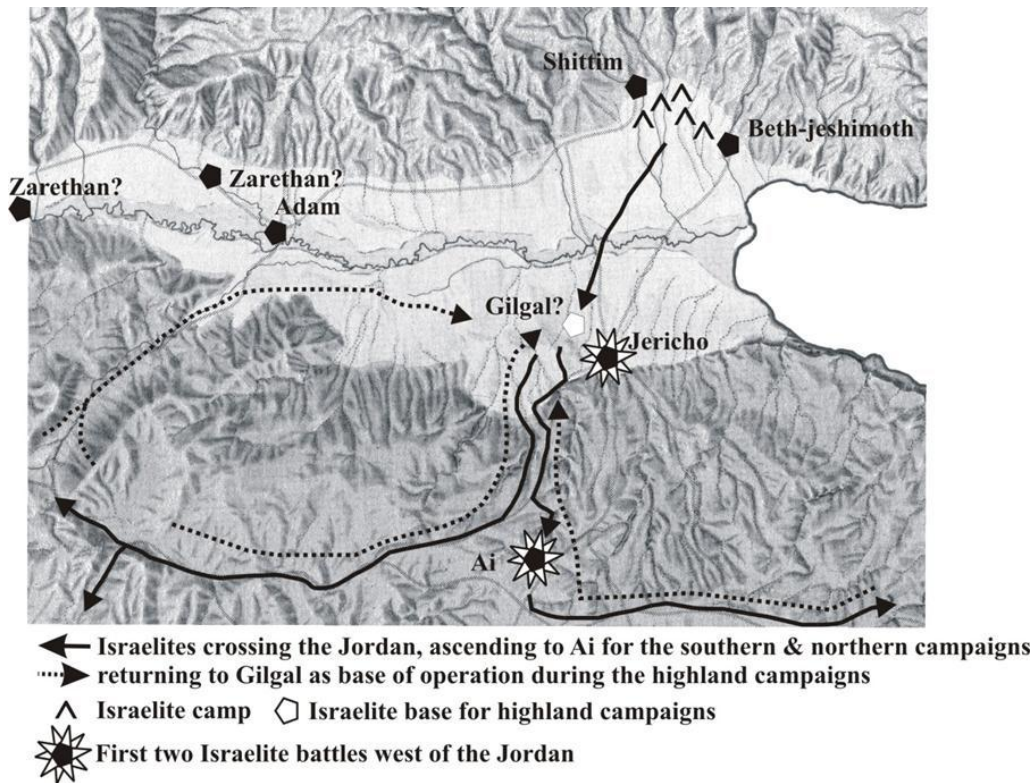


Figure 3.23: The Israelites' base out of Gilgal

The Israelites cross the Jordan south of Zarethan and Adam across from Jericho and establish Gilgal as their base of operation for the battle of Jericho and their southern and northern campaigns in the western highlands (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Other than being based out of Gilgal in the southern part of the valley, there is no reference to the Jordan Valley or the Canaanite population until Joshua 11 when the Israelites' northern campaign began. In the Jezreel Valley at the waters of Merom, King Jabin of Hazor called a large coalition of regional forces to meet the Israelites (Joshua 11). Included in the rallying forces were 'the kings who were of the north in the hill country, and in the Arabah – south of Chinneroth and in the lowland and on the heights of Dor on the west – to the Canaanites in the east' (Joshua 11:2-3). The Canaanites appear to be exclusive to the lowlands and the Amorites, Hittites and lesser tribes limited to the hill country. The forces under Hazor were credited with having chariots (Joshua 11:6, 9). The battle was described as an Israelite victory with Joshua burning Hazor and capturing the other cities of the Hazor coalition (Joshua 11:11-14). After the Israelite victory at the waters of Merom, there is a transition in verse 10 of Joshua 11 that broadened the time sequence of the northern campaign. After the victory, 'Joshua turned back at that time, and captured Hazor' (Joshua 11:10). Although the context is one of immediate continuing action, the total period

of time that Joshua took to battle the individual lands of the defeated coalition (Joshua 11:16-20) described as 'Joshua waged war a long time with all these kings' (Joshua 11:18), is unclear. At the close of this period, the whole of the Arabah was claimed to be under Israelite control (Joshua 11:16). That the biblical authors of Joshua was speaking in general terms is clear for, in the detailed description of the division of the conquered land in Joshua 17, they pointed out that the 'sons of Manasseh could not take possession of these cities, because the Canaanites persisted in living in that land' and furthermore, 'the sons of Joseph said, "The hill country is not enough for us, and all the Canaanites who live in the valley land have chariots of iron, both those who are in Beth-shan and its towns, and those who are in the valley of Jezreel"' (Joshua 17:12, 16).

There were clear pockets of Canaanite controlled land according to the narrative. The Israelites had clearly established themselves in the highlands but it was a gradual process of occupation before they could fully capitalize on their military victories. This process was hinted at in Joshua 17: 'and it came about when the sons of Israel became strong, they put the Canaanites to forced labor, but they did not drive them out completely' (Joshua 17:13). That a tribe should succeed in overcoming a Canaanite force or city without the means to immediately settle it due to a lack of technical or organizational capacity to rebuild and refortify the town (Aharoni 1979:214), is not new. This is a situation common to military movements throughout history. It is one task to win a military victory in the field and it is a totally different task to occupy and settle on the defeated land.

Joshua 12 briefly reviews the conquest of the first eleven chapters. Verses 1-6 describe the territory conquered as

... beyond the Jordan toward the sunrise, from the valley of the Arnon as far as Mount Hermon, and all the Arabah to the east: Sihon king of the Amorrites, who lived in Heshbon, and ruled from Aroer, which is on the edge of the valley of the Arnon, both the middle of the valley and half of Gilead, even as far as the brook Jabbok, the border of the sons of Ammon; and the Arabah as far as the Sea of Chinneroth toward the east, and as far as the sea of the Arabah, even the Salt Sea, eastward toward Beth-jeshimoth, and on the south, at the foot of the slopes of Pisgah; and the territory of Og king of Bashan...who lived at Ashraroeth and at Eddrei, and ruled over Mount Hermon and Salecah and all Bashan, as far as the border of the Geshurites

and the Maacathites, and half of Gilead, as far as the border of Sihon king of Heshbon (Joshua 12:1-6).

In the summary of defeated kings west of the Jordan, only one of those specifically named is located in the Jordan Valley - the king of Jericho (verse 9). Another of the defeated kings is the king of Gilgal (verse 23). Some English translations, such as the New International Version, list 'Goyim the king of Gilgal.' However, the Revised Standard Version based on the Septuagint translates it as 'Goiim of the Galilee.' Both the Codex Vaticanus and Codex Alexandrinus supports this reading (Aharoni 1979:223; ABD 1996, s.v. 'Gilgal').

Much of the Jordan Valley is implied to be under military control as it is clearly within the boundaries of the defeated kings listed in Joshua 12.

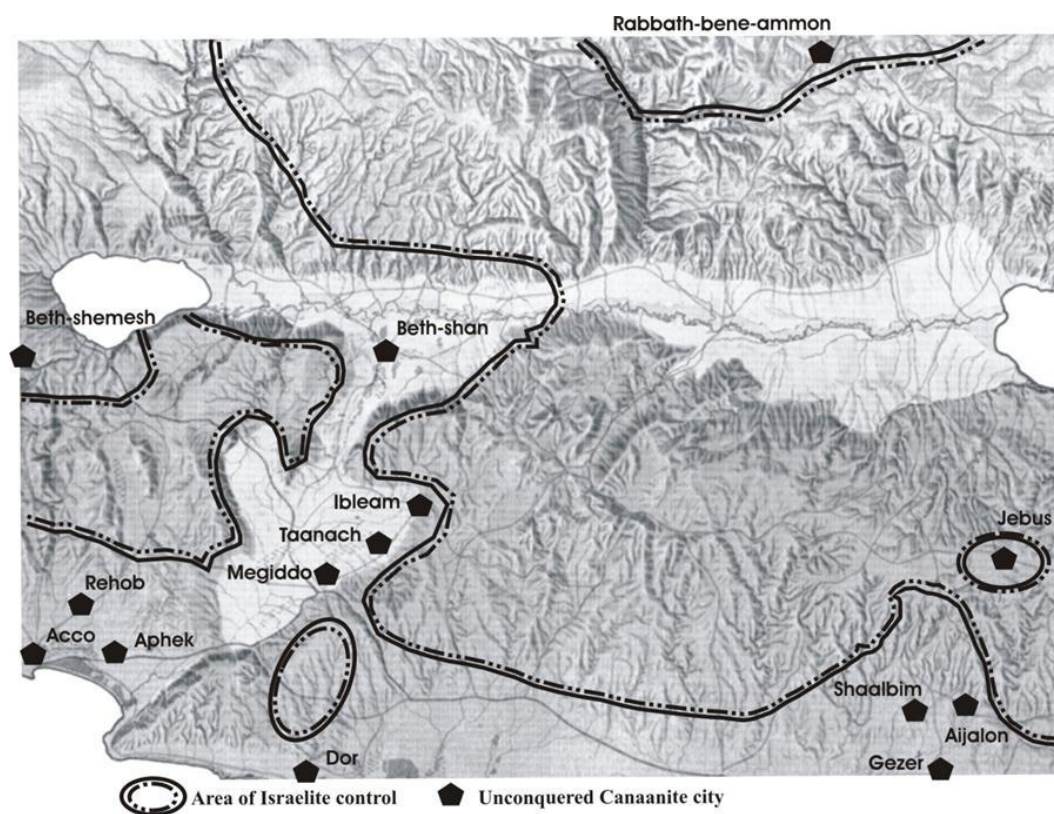


Figure 3.24: The extent of Israelite conquest under Joshua

At the close of Joshua's southern and northern campaigns, most of the highlands were under Israelite control. The lowlands, the coastal plain, the Jezreel Valley and the northern half of the Jordan Valley remained in Canaanite control. Joshua 11 lists a number of Canaanite cities outside Israelite control (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Joshua 13 through 21 describes the territorial allotments of Canaan and Transjordan. The tribes that received allotments in the Jordan Valley are: Reuben (13:15-23), Gad (13:24-28), Manasseh (13:29-31; 17:1-12), Judah (15:1-12), Ephraim (16:1-10),

Benjamin (18:11-20), Issachar (19:17-23), and Naphtali (19:32-34). Eight of the twelve tribes had immediate interests in the Jordan Valley. Manasseh and Gad, followed by Ephraim and Benjamin, clearly had the most vital interest in the valley. Manasseh and Gad had not only the largest portions of valley land but also the main east-west access routes between the eastern and western highlands. Ephraim, Benjamin and Judah had the strategic routes into the central western highlands giving access to the north-south central ridge route. Issachar and Naphtali had the Jordan River as their eastern boundary but their listed settlements were in the Galilean hills. The sharp escarpment dropping down towards the valley floor from the Kokhav and Yisakhar plateaus would impede anything but small local transport on a local path descending from the Kokhav plateau. These two tribes would have much easier access to the Jordan Valley from their southern boundaries in the Jezreel via the Harod valley in the territory of Manasseh (my opinion from field trips between 2000 and 2004).

3.3.4.1 Details of the Jordan Valley allotments

Actual borders of each tribal allotment are impossible to accurately map due to the lack of detail in the accounts. However, the general geographical reference points given and partial city lists matched to known or probable archaeological sites and clear geographical barriers allow some general interpretation to occur (see Figure 3.25).

According to the Book of Joshua, the land allotments were given at two distinct locations. While still based in Gilgal, Joshua handed out allotments to Judah, Ephraim and Manasseh (Joshua 14-17). After the assembly moved to Shiloh (Joshua 18:1), the remaining allotments were given (Joshua 18-19). The allotments were made up of both geographic border markers and cities.

The allotments of Reuben and Gad by Joshua in Joshua 13 were slightly different from their original allotments given by Moses in Numbers 32. The easiest solution to the differences is to see Joshua upholding the majority of the Mosaic allotments but making slight changes to match the immediate circumstances after the conquest, defining their tribal borders distinctly rather than their original intermixing (Merrill

1987:132). This solution also supports Aharoni's position that all the tribal territory and city lists came from one detailed list (Aharoni 1979:250) and the differences in detail and connecting verbs between the individual tribe descriptions as well as the Joshua and Judges lists, are simply the work of the writer editing to fit his need (Aharoni 1979:248, 251-255).

Speculation on individual tribal interests in or interaction with the valley can be made by examining their territorial boundaries in the valley. For example, Judah's boundary includes a small section of the valley with its northeast border beginning at

...the Salt Sea, as far as the mouth of the Jordan. And the border of the north side was from the bay of the sea at the mouth of the Jordan. Then the border went up to Beth-hoglah, and continued on the north of Beth-arabah. And the border went up to the stone of Bohan the son of Reuben. And the border went up to Debir from the valley of Achor, and turned northward toward Gilgal which is opposite the ascent of Adummim, which is on the south of the valley (Joshua 15:5-7).

Judah's main interests in the Jordan Valley must have flowed solely up and down the Ascent of Adummim or from the other tribal territories farther north. The terrain south of the Ascent of Adummim, flowing northeast from the Judean tableland through the wilderness down into the valley, is impassable for commerce and large groups of people. Within the available sources, this author could not find any historical mention (Egyptian or Biblical) of a road or route running from the Jordan Valley south along the western shore of the Dead Sea. All movement from Ein-gedi in later periods was in an east-west direction across the Lisan and/or straight up into the western highlands (I Samuel 22:3).

3.3.4.1.1 Ephraim (Joshua 16:1-4)

Ephraim's Jordan Valley allotment is described as 'from the Jordan at Jericho to the waters of Jericho on the east into the wilderness, going up from Jericho through the hill country to Bethel' and after looping through the western highlands, it came 'down from Janoah to Ataroth and to Naarah, then reached Jericho and came out at the Jordan' (Joshua 16: 1, 7). Ephraim's access to the valley floor came from the descent from Naarah as well as the points emanating from the vicinity of Jericho and shared with Benjamin and Judah.

3.3.4.1.2 Benjamin (Joshua 18:11-28)

Benjamin's southern border is described in detail in Joshua 18:11-25. Despite several unidentified reference points, combining Joshua 18 with the description of Judah's northern border in Joshua 15, a detailed line can be seen starting at the mouth of the Jordan to Bethhoglah – near Ain Hajlah (unknown) to north of Beth-arabah near 'Ain el-Gharabeh (unknown) to the stone of Bohan the son of Reuben (unknown) to Debir from the Valley of Achor (unknown) to Geliloth opposite the Ascent of Adummim which is on the south side of the valley. Benjamin's northern border shared with Manasseh and Ephraim ran from the Jordan River, the north side of Jericho and then up through the hill country westward. Benjamin was strategically located with the key southern fords across the Jordan River and access up to the Central Benjamin Plateau with the Wadi Qelt and Ascent of Adummim routes. The detailed boundary descriptions of Benjamin with Judah and Ephraim emphasize the strategic nature of Jericho and the three routes from the Jordan Valley up to the Central Benjamin Plateau (see 2.3.2.2.4).

3.3.4.1.3 Manasseh – western and eastern half (Joshua 17 and 13:29-31)

Manasseh's southern border with Ephraim is described only westward starting at Shechem. The northern border is only described in relation to Asher and Issachar's southern border including the towns of Beth-shan and Ibleam within Manasseh's territory.

The boundaries for Manasseh east of the Jordan River are very vague. The southern border is shared with Gad at the city of Mahanaim. Geographically, it is easy to assume that the northern boundary with Gad ran east-west of the Jabbok River (separating lower and upper Gilead) regardless of which possible site for Mahanaim is used. All of Bashan and half of Gilead is the territory given to Manasseh. This area included the town of Jair and reached northeast as far as Ashtaroth and Edrei.

3.3.4.1.4 Issachar (Joshua 19:17-23)

Issachar has its western border on a line from Jezreel (Zer'in) north through Shunem (Solem) to Kesulloth (Chisloth-tabor), east from Jezreel the border ran toward

Remeth (Jarmuth, three miles from the Jordan and eight north of Beth-shan), and from there it continues north along the Jordan River and then west to Mount Tabor (Joshua 19:17-23). Issachar had a very small portion of territory, and most of it was lowland territory in the Jezreel and around Beth-shan which was still under Canaanite control at the time of allotment (Joshua 17:16). This gave Issachar limited access to the Jordan Valley.

3.3.4.1.5 Naphtali (Joshua 19:32-34)

Naphtali had even less access to the valley than Issachar. The Jordan Valley was the border which ran down from the Oaks of Zaanannim to Lakkum, touched the Jordan River and then ran north along the lake to Hammeth.

3.3.4.1.6 Gad (Joshua 13:24-28)

Gad appears to be given the whole valley floor east of the river, from Beth-haram and Beth-nimrah situated on the plains of Moab and as far north 'as the lower end of the Sea of Chinnereth' (Joshua 13:27). The eastern boundary ran up the Jabbok River Valley, passing by Mahanaim, encircling all of Gilead and looping southeast near Amman and encompassing Heshban on the plains of Madaba, before heading down the slopes to the plains of Moab. The eastern border from the Jabbok River Valley north must have followed the base of the steep escarpment on the valley floor.

3.3.4.1.7 Reuben (Joshua 13:15-23)

Reuben was primarily settled on the Madaba Plateau. From a shared border with Gad at Heshbon, a sliver of territory descended down the slopes of Pisgah to Beth-jeshimoth and the Jordan River. Both Reuben and Gad had control of routes from the Plain of Moab up to the eastern highlands and the north-south international highway.

3.3.4.1.8 Cities of Refuge and the Levitical cities (Joshua 20-21)

None of the six Levitical cities of refuge are located in the Jordan Valley. It is noteworthy, however, that they are evenly divided in the highlands (north, central

and south) with three on each side of the valley. In the setting up and administering of the six cities of refuge, the difficulties of access that the geography of the valley could present is purposefully overcome. For residents in the valley, three of the cities (Shechem, Bezer on the Madaba Plateau and Ramoth in Gilead) would be the easiest to access (see Figure 3.22 for locations of the Levitical cities).

Of the forty-eight Levitical cities listed, forty-five have been identified by J. Peterson (1977). Of the forty-five identified, none are in the Jordan Valley. However several are placed along key routes that descend from the highlands to the valley from the Lower Galilee in the north, the Wadis Farah and Wadi Jabbok in the central 'waist' and the Wadis Hisban and Makuk in the south (see Figure 3.22 and 2.17). The Levitical cities were not placed at the tribal centers of the prospective territories. The Levitical cities were placed in border areas where garrisons were required (Elwell 1988, s.v. 'Levi, Tribe of'). Levitical cities were grouped on the eastern border of Reuben, in the southern hill country of Judah and Simeon, and in the territories of Asher and Manasseh. Some of the cities were in territories that were not conquered under Joshua, 'Thus, the Levites were assigned places where the special task of controlling strategic areas was necessary' (Elwell 1988, s.v. 'Levi, Tribe of'). Beyond the religious role that the Levites played in Israelite society, the strategic natures of their cities suggest a garrison function as well.

This dual role of warrior/priest underlines the strategic nature of Mahanaim which guarded the Jabbok River canyon route up to the eastern highlands of Gad. The function of the Mahanaim garrison could be either a generic guard station of a strategic checkpoint or a response to an active threat of Canaanite activity in the Jordan Valley or Moabite/Midianite threats from the east.

3.3.4.2 Mapping the Tribal Territories and City Lists of Joshua 15-19

The following map and table is designed to help visualize the Israelite tribal connection to the Jordan Valley. Table 3.10 contains points of tribal boundaries taken from Joshua 13, 15-19 and arranged in columns according to tribe. Specific cities are numbered and marked on the map of Figure 3.25 in an approximate

location to their primary generally accepted site. Section 2.3.1 treated the main issues of identifying the various locations of the Jordan Valley sites.

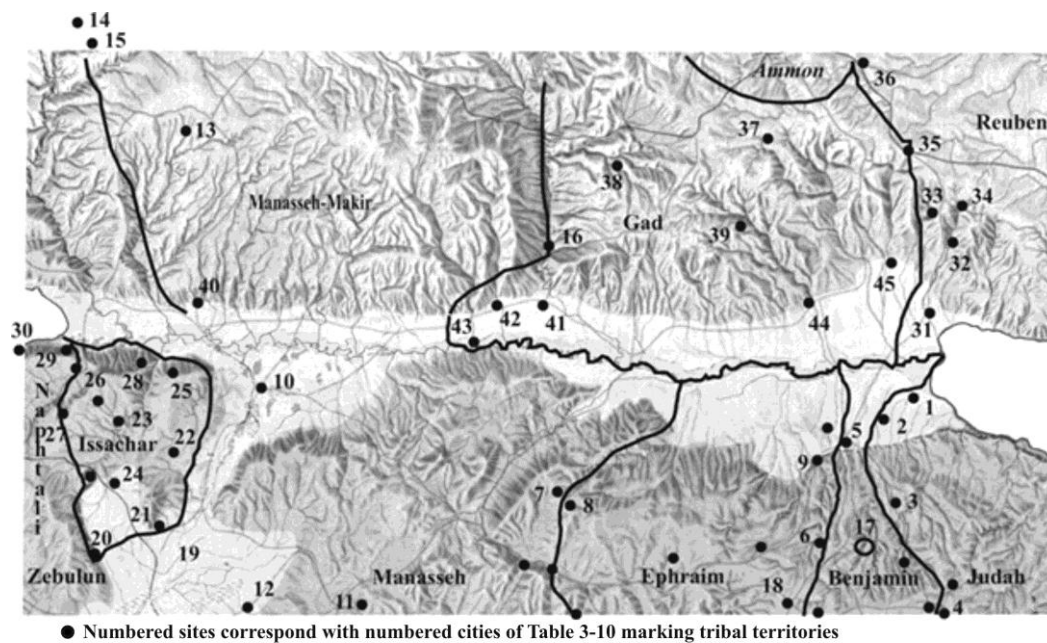


Figure 3.25: Tribal allotments of Joshua 15-19
The tribal allotments using boundary markers from Table 3.10 (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Table 3.10: Listed points of tribal boundaries

Judah: Eastern/northern Borders (Joshua 15:1-5)	Ephraim: Southern border (Joshua 16:1-7)	Manasseh: Western side northern border (Joshua 17:11)	Benjamin: north then South border (Joshua 18:11- 20)	Issachar (Joshua 19:17-23)	Naphtali (Joshua 19:32-34)
Salt Sea	Jordan River	10 Beth-shan	Jordan River	19 Jezreel	27 Heleph (Khirbet 'Irbadeh?)
Mouth of Jordan	5 Jericho (to the waters east)	11 Ibleam	5 Jericho (north side)	20 Chesulloth	28 Oak in Zaanannim
1 Beth-hoglah	6 Bethel	12 Taanach	17 Beth-aven (wilderness)	21 Shunem	29 Lakkum (Khirbet el- Mansurah?)
2 Beth-arabah	Northern border	Manasseh/Makir Eastern side (Joshua 13:29-31)	18 Luz/Bethel	22 Hapharaim	Jordan River
Stone of Bohan	7 Taanath- shiloh (Khirbet Ta'na el-Foqa)	13 Towns of Jair	Geliloth (Opposite the Ascent of Adummim)	23 Anaharath	30 Hammath
Valley of Achor	8 Janoah (Khirbet el- Yanun)	14 Ashtaroth	Stone of Bohan (?)	24 Kishion	
Debir	Ataroth	15 Edrei	Down to the Arabah	25 Remeth	
Gilgal	9 Naarah (Tell el-Jisr)	16 Mahanaim	1 Beth-hoglah (near 'Ain Hajlah?)	26 Beth- shemesh?	
3 Ascent of Adummim	5 Jericho		Salt Sea/ mouth of Jordan	Jordan River	
4 Jerusalem	Jordan River				

Reuben Northern border (Joshua 13:15-23)	Gad: South then north border (Joshua 13:24-28)	
Jordan River	37 Jazer?	42 Zaphon (a)?
31 Beth-jeshimoth	35 Heshbon	43 Zaphon (b)?

32 Slopes of Pisgah	38 Ramath-mizpah (?)	44 Beth-Nimrah
33 Beth-peor	39 Betonim	45 Beth-Haram
34 Kiriathaim (?)	16 Mahanaim	Jordan River
35 Heshbon	40 Debir (Lo-debir?)	Sea of Chinnereth
36 Mephaath?	41 Succoth	

3.3.5 The Book of Judges

The book of Judges links the conquest narrative of Joshua to Samuel who anoints Israel's first kings. The numerous citations of 'in those days Israel had no king' (Judges 17:6; 18:1; 19:1; 21:25) clearly leads one to believe that the book was written, or at least edited, in a later period when Israel had a king. The book of Judges contains several accounts relating to the Jordan Valley. The book opens by reiterating the fact that much of the land was still contested between the Israelites and the Canaanites in parts of the highlands and lowlands (Judges 1) (see Figure 3.24). At the beginning of the book, Beth-shan and its villages are mentioned as being in Canaanite control (Judges 1:27) and they appear to remain outside of Israelite control through the time of the death of King Saul on Mount Gilboa whose body was hung by the Philistines on the walls of the city (I Samuel 31:8-10).

The first two chapters of Judges summarizes the first two generations after Joshua (Judges 2:7-10). While Judges 1 describes the physical battle, Judges 2 describes a cultural battle between the Israelite and Canaanite cultures with the Israelites taking on and participating in various aspects of the local religious system (Judges 2:11-13). The primary purpose of the book of Judges is to demonstrate for the Israelites the spiritual and moral cycle which connected obedience to blessing and disobedience to slavery. The cycle was illustrated through a series of historical narratives as found in Judges 2:14-23:

And the anger of the Lord burned against Israel, and He gave them into the hands of plunderers who plundered them; and He sold them into the hands of their enemies around them, so that they no longer stand before their enemies... then the Lord raised up judges who delivered them from the hands of those who plundered them ... the Lord was with the judge and delivered them from the hand of their enemies all the days of the judge ... but it came about when the judge died, that they would turn back and act more corruptly ... So the anger of the Lord burned against Israel, and He

said, "... I also will no longer drive out before them any of the nations which Joshua left when he died..." so the Lord allowed those nations to remain, not driving them out quickly (Joshua 2:14-23).

Judges 3 opens with a list of groups still in the land that was supposed to be within the control of the Israelites after the conquest. The Israelites began to intermingle with both the Amorites of the hill country as well as the Canaanites of the lowlands who maintained resident populations: 'And the sons of Israel lived among the Canaanites, the Hittites, the Amorites, the Perizzites, the Hivites, and the Jebusites; and they took their daughters for themselves as wives, and gave their own daughters to their sons, and served their gods' (Joshua 3:5-6). The book of Ruth is a clear example of this intermixing.

The rest of Judges is full of illustrative narratives of the Israelites' relations with the people in the southern Levant. The following accounts all have elements dealing with the Jordan Valley:

3.3.5.1 Ehud (Judges 3:12-30)

The narrative of Ehud delivering Israel from Eglon, the King of Moab, describes an alliance between Moab and Ammon. Moab had taken possession of Jericho for eighteen years. For Moab to possess Jericho, 'the city of the palm trees' (see Deuteronomy 34:3 and II Chronicles 28:15), would signify Moabite control of the Southern Jordan Valley including the Plains of Moab and the slopes of Pisgah up to Madaba plateau. After killing Eglon, Ehud escaped to Seirah. This is the only mention of Seirah, and hence, without further context, it is unknown whether it was a specific location or region. Simons argues that Seirah is a topographical feature parallel with *happěsîlîm* ('the quarries' or 'the idols' in Judges 3:19, 26). *Haśśě-îrātâ* is best understood with the word meaning 'the woody hills' (Simons 1959:288). This reading makes sense in the context of verse 27 and the response of the 'sons of Israel [who] went down with him from the hill country.' Ehud would have only needed to make it to the far side of Gilgal (from Jericho) to be in the territory of Ephraim. When the Israelites rallied to Ehud, they descended from the hill country and 'seized the fords of the Jordan opposite Moab' (Judges 3:28). After gaining control of the fords, the Israelites (west of the Jordan) were free of the Moabites for eighty years.

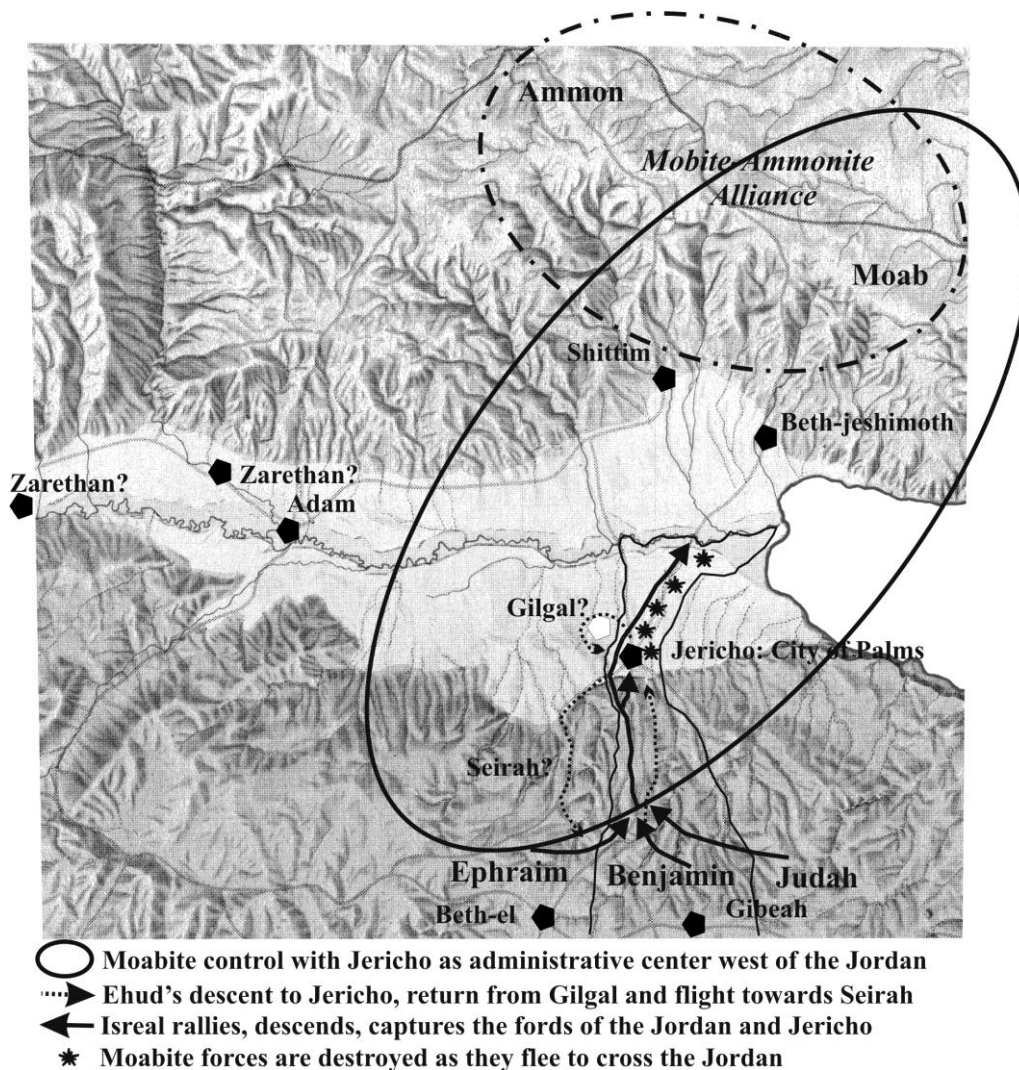


Figure 3.26: Ehud and the Moabites at Jericho

Moab made an alliance with Ammon and the Amalekites and ruled over Israel for 18 years. The Moabite ruler, Eglon, made Jericho an administrative center. Ehud of Benjamin joined the annual tribute party, descending from the western highlands. After paying tribute and leaving Jericho, he returned from Gilgal, killed Eglon and fled towards Seirah in the Ephraim highlands. Ehud gathered Israel to attack the Moabites, first cutting off their escape route by controlling the southern fords of the Jordan River and then destroying the Moabite forces as they retreated east (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.3.5.2 Shamgar (Judges 3:31)

Shamgar, the son of Anath, is mentioned only twice in the Bible. His actions are described in one verse: 'And after him came Shamgar the son of Anath, who struck down six hundred Philistines with an ox goad; and he also saved Israel' (Judges 3:31). He is mentioned again in Deborah's song: 'In the days of Shamgar the son of Anath, in the days of Jael, the highways were deserted, and travelers went by roundabout ways' (Judges 5:6). Although the mention of the Philistines immediately makes one think of the coastal plains, the dating of Shamgar before Deborah in an Early Conquest model is too early for the main Philistine immigration usually dated around

1200 BC. Shamgar is not a Semitic name and probably of Hurrian origin (ABD 1996, s.v. 'Shamgar'). Albright, focusing on Shamgar being 'the son of Anath', relates him to the town of Beth-Anath' in Galilee (Albright 1921:57). But the Hebrew label *ben ʾānāt* may be a military designation involving the name of the goddess Anath, who was consort of Baal and a warrior-goddess (ABD 1996, s.v. 'Shamgar'). That Shamgar's account is so brief and out of context with the other judges' accounts in not stating that he ruled Israel after his deliverance creates even more speculation regarding his identity. He is sometimes identified as a Hurrian newcomer, possibly joining the Israelites or a local brigand 'saving Israel' directly or indirectly by the killing of the Philistines or simply as an Israelite judge. Shamgar would receive little comment in this study except that the only archaeological evidence for Sea Peoples in the southern Levant in this period comes from Beth-shan and Tell Sa'idiyeh (the anthropoid coffins and double-pithos burials) that suggest a population of early Sea People associated with the Egyptian garrisons (cf. Oren 1973: 130-131; 136-140; 147; Tubb 1998:96-106; see 4.2.1.1 and 4.2.2.6). Aharoni interprets Shamgar's deed as 'the capture of the Egyptian fortress at Beth-shan, an act which would appeal both to the Israelites and Canaanites' (Aharoni 1979:226-229). With so little information on Shamgar, the most that could be speculated on Shamgar in the scope of this study, is that he eliminated a military unit of Philistine mercenaries that were occupying the northern valley gateways while Israelite travellers stayed off the main roads (Judges 5:6).

3.3.5.3 Deborah (Judges 4-5)

The battle between Barak and Sisera under the judgeship of Deborah took place west of Mt. Tabor in the Jezreel Valley. The immediate activities did not involve the Jordan Valley. Although the activities happen just outside of the Jordan Valley, this paper has already made a close connection between the Jezreel and Jordan Valleys. It is hard to believe that a Canaanite force under the king of Hazor with its commanding general based in the Jezreel (Harosheth-hagoyim), did not influence the Canaanites still living around Beth-shan and the Northern Jordan Valley as well as any Israelites in their proximity.

Deborah's story is given in two accounts: A narrative in Judges 4 and a poem in Judges 5. The accounts of Deborah provide much discussion for the validity and chronology of the book. The author is aware of the many debates around chronology of not only the narrative events but the chronology of the accounts themselves. The poetic language of Judges 5 is written in an archaic Hebrew in comparison with Judges 4 which is in line with the rest of the book. From this fact, many scholars consider Judges 5 to be a much earlier account of the events of Judges 4. The author of this thesis has already stated the position of not entering into any deep issues of literary criticism and to take the texts at face issue in order to keep the general survey to a manageable size.

In this same account, the character Jabin, king of Hazor, also draws much discussion. Is the Jabin of the Deborah account the same Jabin of Joshua 11:5-7? Scholars have proposed a number of solutions to reconciling these two characters from placing the Judges account before Joshua's; to claiming the two accounts are different versions of the same event; to suggesting that Jabin is a dynastic name for the ruler of Hazor and therefore can refer to members of several generations (Aharoni 1979:221-227).

The Canaanite chariot force in the battle between Barak and Sisera is similar to the Canaanite forces fielded against Thutmose III (section 3.2.1.4; ANET 1955:235, lines 19-24). An imperial Egyptian presence or interest in the area would certainly have difficulty in allowing this type of force to exist. For this reason, Aharoni places the battle of Deborah sometime late in the 13th century as the latest date, but does not rule out earlier dates: 'A battle of this size would hardly be tolerated by a strong Egyptian regime, and most likely fits during the later years of Ramses II when Egypt's projection of power was weak' (Aharoni 1979:229).

According to Rainey, the best translation for Sisera's base of Harosheth-hagoyim is 'plantation of the Gentiles' (Rainey & Notley 2006:151). This area was between Taanach and Megiddo and has a long history of Egyptian imperial interest. During the late Bronze Age it was both a strategic control point along the coastal highway as well as an important grain producing area, governed as royal estates during periods of Egyptian power (Na'aman 2005:232-241). If Egyptian power was not a concern in

the Jezreel in the period of this event, Egyptian power would be non-existent in the Jordan Valley. An Israelite victory over such a large Canaanite force in an area of strategic interest to Egypt would make a subsequent Egyptian victory over the Israelites worth bragging about as in the Merneptah stele.

In regards to the Jordan Valley, at least some Canaanite forces from Hazor and the Huleh basin would have traversed the Northern Jordan Valley on the established travel routes. No specific Canaanite forces are mentioned in the text, although those in the Northern Jordan Valley would surely have participated in some way in such a large gathering of forces. Sisera's escape route up the Jabneel Valley to the Oak of Zaanannim between Mt. Tabor and the Jordan Valley on the border of Issachar and Naphtali territory suggests a plan to continue into the Valley and up the trade routes to Hazor. The tribes of Reuben and those living in Gilead across the Valley were chastised for not participating in the battle: 'Why did you sit among the sheepfolds, to hear the piping for the flocks? Among the divisions of Reuben there was great searching of heart. Gilead remained across the Jordan' (Judges 5:16-17). This suggests a sense of unity with an expectation to assist in times of need between the Israelite tribes across the valley, but a reality of non-participation across the river.

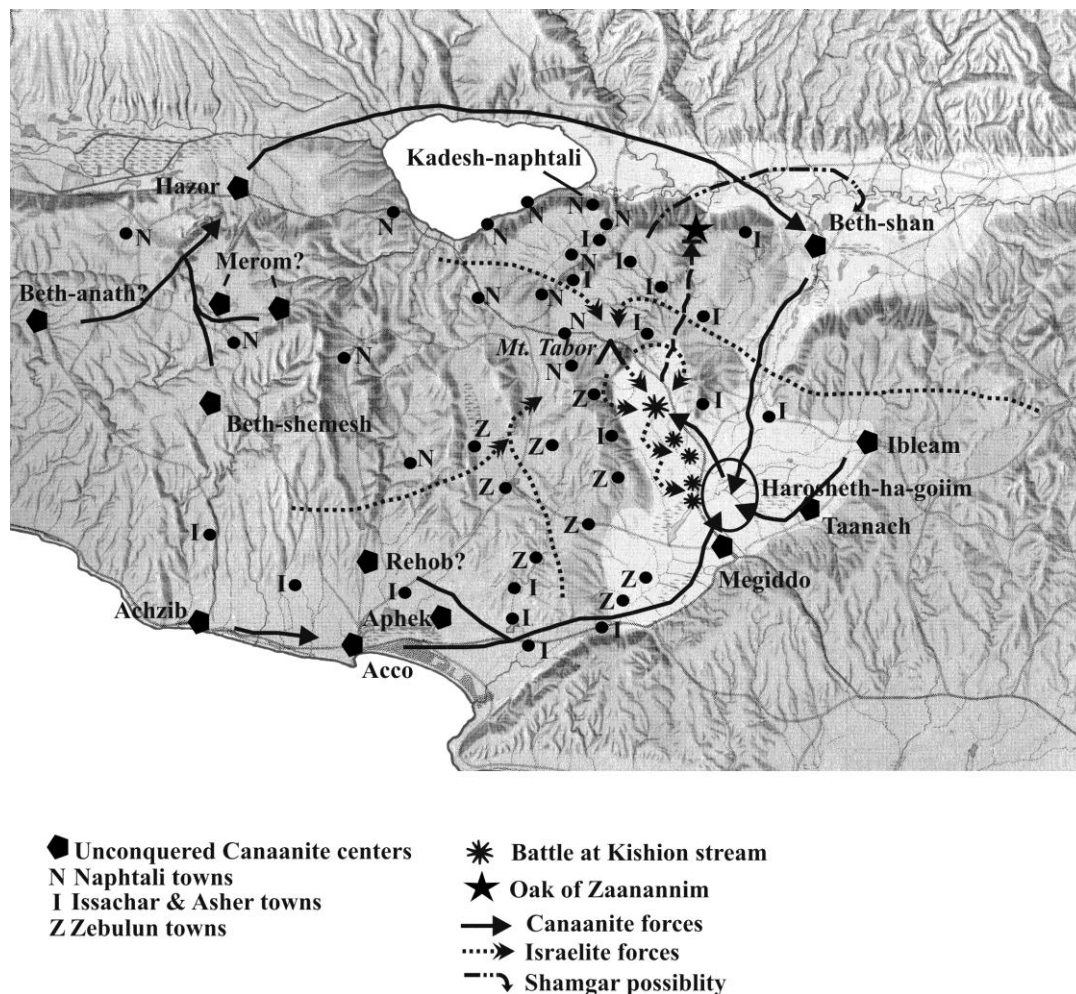


Figure 3.27: Battle of Kishion and Sisera's flight towards the Jordan Valley

Deborah called Barak from Kadesh-Naphtali to gather Israel at Mt. Tabor while she lured the Canaanites to the Spring of Kishion. The Canaanites gathered on the plain of Harosheth-ha-goiim before moving towards Mt. Tabor. The Canaanites were defeated at Kishion and destroyed as they retreated towards Megiddo. Sisera fled towards the safety of the Canaanite controlled Northern Jordan Valley but was killed at the Oak of Zaanannim. The Canaanite forces from Hazor and the Huleh Basin would have traveled east of the Sea of Galilee and through the Northern Jordan Valley past Beth-shan to Harosheth-hagoyim due to the control of the Lower Galilee by the tribes of Naphtali, Zebulun, Issachar and Asher. Preceding Deborah, Shamgar the son of Anath, could possibly be from Beth-Anath in the Galilee and attacked a Philistine garrison possibly at Beth-shan (Aharoni 1979:226-228) (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.3.5.4 Gideon (Judges 6-8)

The period of Gideon closes off a seven year period of Midian domination in the agricultural and pastoral lands of Canaan. The situation described is one of semi-nomadic groups sweeping into rural agricultural settlements near harvest time and plundering the farms and storehouses:

For it was when Israel had sown, that the Midianites would come up with the Amalekites and the sons of the east and go against them. So they would camp against them and destroy the produce of the earth as far as Gaza, and leave no sustenance in Israel as well as no sheep, ox or donkey (Judges 6:3-5).

This pattern of eastern highlanders sweeping onto the farming plains of the Jordan Valley and other settled areas of the region whenever there was no central authority to police the area is well documented from this period to the establishment of the British mandate in the early 20th century AD (Abujaber 1989: 1-47; Steen 2002:78, 79, 95-97).

In this particular period of Judges 6-8, the Midianites were joined with other 'sons of the east' and dominated the farmlands as far as Gaza. The Jordan Valley was certainly involved and living under the domination of the Midianites during this time, as Gaza is listed as the most westward point of Midianite raids and Gideon defeated them at their camp in the Jezreel (Judges 6:33) and then pursued them up into the eastern highlands. Gideon pursued the retreating Midianites as they 'fled as far as Beth-shittah towards Zererah, as far the edge of Abel-meholah, by Tabbath' (Judges 7:22-23). These locations are not precisely known and candidates for the sites exist on both sides of the river (see 2.3.1.2.1). They are en route to one of the Jordan River crossings, probably the central crossing north of Adam near the city of Beth Barah (Judges 7:24). Beth-barah is an undetermined location but must be near or on the Jordan River in the central 'waist.' The meaning of the name is unclear but could easily be a corruption of *Bet – abara* which would be the place of the ford, matching the context of being on the river (ABD 1996, s.v. 'Beth-barah'). The chase continued up the wadi Zerqa/Jabbok towards Penuel (Judges 8:4-9). Once, Gideon had the Midianites routed out of the Jezreel, with the help of Naphtali, Asher and all of Manasseh (Judges 7:23), he called on Ephraim to

...[c]ome down against the Midianites and seize the waters of the Jordan ahead of them as far as Beth Barah. So all the men of Ephraim were called out and they took the waters of the Jordan as far as Beth Barah. They also captured two of the Midianite leaders, Oreb and Zeeb. They killed Oreb at the rock of Oreb, and Zeeb at the winepress of Zeeb. They pursued the Midianites and brought the heads of Oreb and Zeeb to Gideon, who was by the Jordan (Judges 7:24-25).

On the east side of the Jordan, Gideon's pursuit went from Succoth to Penuel and then on towards Karkor before he returned via the 'descent of Heres' (Judges 8:13). The 'descent of Heres' has not been identified however, the route from Succoth (Deir 'Alla) to Penuel (Tells edh-Dhahabe esh-Sharqi or el-Gharbi) can only be up the

Wadi Zerqa, following the Jabbok/Zerqa River. Karkor has not been clearly identified either. However, the context and most scholarship clearly points to a location on the highlands east of the Wadi Zarqa (ABD 1996, s.v. 'Karkor'). The path Gideon took to Karkor clearly reflects a common east-west route from the Jordan Valley floor to the eastern highlands.

That both the inhabitants of Succoth and Penuel refused to give aid to Gideon reflects the disunity of the territories across the Jordan River. Both cities were within the territory of Gad (Joshua 12:24-28) and should have been sympathetic to Gideon. Although Aharoni strongly suggests that as Penuel is described solely by its architecture, it belonged to a Canaanite enclave in the Gad-Gilead region like the one at nearby Zaphon and Canaanite Shechem (Aharoni 1979:264). Both cities feared supporting Gideon as long as the two Midianite leaders were still alive: 'Do you already have the hands of Zebah and Zalmunna in your possession? Why should we give bread to your troops?' (Judges 8:6). After defeating the Midianites, Joshua returned and disciplined both cities.

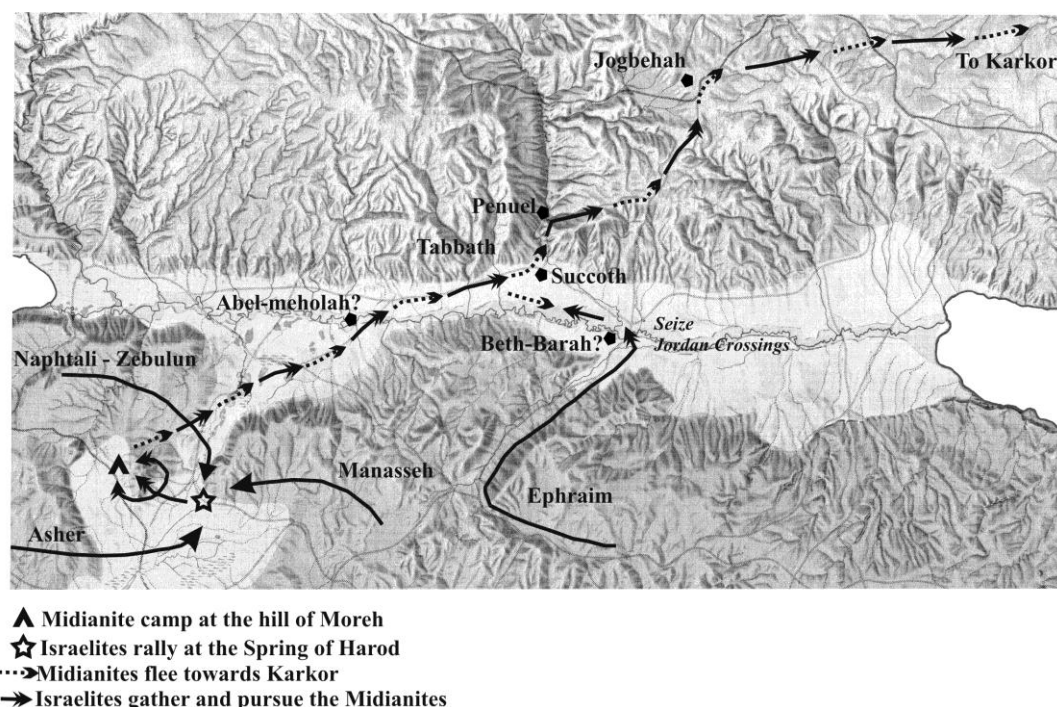


Figure 3.28: Gideon's running battle with the Midianites
 (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

The Midianites, Amalekites and other 'sons of the east' raided the Jezreel Valley and the coastal plains. While camped near the Hill of Moreh, Gideon summoned

Manasseh, Naphtali, Issachar and Zebulun to the Spring of Harod. Routing the Midianites at night, Gideon's force pursued the Midianites into the valley and up the eastern slopes to the plateau towards Karkor. Ephraim descended to the Central Jordan Valley, seized the central fords of the Jordan River, captured two Midianite kings and forced the Midianites up the Wadi Jabbok to Penuel. The towns of Succoth and Penuel refused to help Gideon while the other Midianite leaders were still free. After capturing the remaining Midianite leaders, Gideon disciplined the leaders of both towns and tore down the stronghold of Penuel.

The Midianites are described as having many camels (Judges 6:5; 7:12; 8:21, 26), 'both they and their camels were innumerable; and they came into the land to devastate it,' (Judges 6:5). Albright and others of the last century have made this reference to domesticated camel use as a key point in dating the Gideon story no earlier than the 1200s because there was no evidence for camel domestication this early (c.f. Albright 1945; 1949:207; 1970 and Kohler-Rollefson 1993:183). However, the date of camel domestication in the region continues to move forward with the weight of more and more archaeological evidence. Excavations at Tell Dayr 'Alla, in the Jordan Valley, have found a Late Bronze Age sherd with artistic representation of a camel caravan (Ibrahim & Van der Kooij 1983:581). The 1998 study by Andrews University in the Sinai at Wadi Nasib have revealed a number of petroglyphs showing camel caravans led by humans. The petroglyphs range from the 12th to 18th dynasties of Egypt. The Gerster Inscription I, located immediately next to the camel petroglyphs, is dated to the 15th century BC. There is no evidence of human activity in the wadi after 1500 BC (Younker & Koudele 2007:57).

From Syria to Egypt, including Cis- and Transjordan (Younker & Koudele 2007:59), the camel appears to be playing a role in transportation and possible warfare much earlier than the Late Bronze Age. The ability of the camel as a beast of burden would greatly expand the ability of the Midianites to project their power into the Jordan Valley from the traditional south eastern strongholds and is congruent with a Late Bronze Age setting (Sauer 1995:42).

An underlying theme of the Gideon account is the conflict between Israelite and Canaanite religions. The Israelites had accepted the gods of Canaan by dedicating an altar to Baal and erecting Asherah (Judges 6:25). The Israelite acceptance and dedication to the Canaanite deities must have run deep, for members of Gideon's own clan sought his death for Gideon's action of tearing down the altar to Baal and cutting down the Asherah (Judges 6:28-30). Again, the Judges account shows a mixing and mingling of religion and people between the Israelites and Canaanites that spanned the Jordan Valley into both the western and eastern highlands.

3.3.5.5 Jair (Judges 10:3-5)

Jair the Gileadite is considered a minor judge with only three verses dedicated to him: 'He was followed by Jair of Gilead, who led Israel twenty-two years. He had thirty sons, who rode thirty donkeys. They controlled thirty towns in Gilead, which to this day are called Havvoth Jair. When Jair died, he was buried in Kamon' (Judges 10:3-5).

A son of Manasseh, Jair is eponymous to the region of Bashan and specifically to the sub-region of Argob (Numbers 32:41; Deuteronomy 3:14; Joshua 13:30; 1 Kings 4:13). The area of Argob has not been identified but all candidates for the area listed in the Anchor Bible Dictionary (ABD 1996, s.v. 'Argob') place it east of the Jordan Valley in the upper tablelands. The same goes for Jair's burial place in Kamon. Most scholarship places the probable location in the Transjordanian highlands, the most westward candidate being just east of Um Quiess (ABD 1996, s.v. 'Kamon'). One exception to locating Kamon in the eastern highlands is that of Keil and Delitzsch who argue that Kamon could be in Cis-Jordan (Keil & Delitzsch 1986:372-73). Their argument for a Cis-Jordan possibility comes from the main point that Jair is described as leading Israel as a collective not just as regional leader. Keil and Delitzsch give no further details for their argument. But the basis of their point simply shows a connection of Gilead and Bashan with the territories across the Jordan Valley in Cis-Jordan. This concept of unity is not seen in Gideon's account nor in the judges following Jair, Jephthah.

3.3.5.6 Jephthah (Judges 10:6-12:7)

After the brief account of Jair, the focus of Judges remains in the Transjordan. The overall spiritual condition of Israel was one of mixing their religious identity with the surrounding groups: 'Then the sons of Israel ... served the Baals and the Ashtaroth, the gods of Aram, the gods of Sidon, the gods of Moab, the gods of the sons of Ammon and the gods of the Philistines' (Judges 10:6). Outside of the brief mention of the Philistines during the judgeship of Shamgar (section 3.3.5.2), this is the first clear mention of the Philistine religion and strife with the Israelites. 'He (Yahweh) sold them (Israel) into the hands of the Philistines' (Judges 10:7). This reference to the Philistines as well as other internal details of the story, which will be addressed shortly, help to date the events of the story to one of the latter judges in the last half of the 11th century BC (Merrill 1987:190; Rainey & Notley 2006:140). The Philistine reference appears to be an introductory reference stating the condition of all Israel before the story narrows to focus on the Ammonite conflict in Transjordan and the Jordan Valley (Judges 10:8-9). Strife with the Philistines is continued in detail in the Samson account (Judges 13-16) immediately following Jephthah.

In the account, the Ammonites had 'for eighteen years afflicted all the sons of Israel who were beyond the Jordan in Gilead in the land of the Amorites. And the sons of Ammon crossed the Jordan to fight also against Judah, Benjamin, and the house of Ephraim so that Israel was greatly distressed' (Judges 10:8-10). The Ammonite projection of power into Gilead and across the Jordan does not appear to be one of occupation. Ammonite military strength was strong enough to 'distress Israel' and the Israelites could not prevent them from making deep forays into and across the Jordan Valley, but the Gileadites were still fighting (looking for a stronger leader) and the Ammonites were willing to entertain several exchanges from Jephthah in attempts at negotiating a solution to the issue of land ownership (Judges 10:18-11:28).

In the negotiation attempts, Jephthah made a historical case that Israel had not taken any Ammonite land, only the land of Sihon, king of the Amorites (Judges 11:15, 21-25). Numbers 21:26 recounts that it was Sihon who took the land from Moab.

After denying that Israel ever took Ammonite land, Jephthah made an additional point by using an historical precedent for the invalidity of Ammonite land claims: 'While Israel lived in Heshbon and its villages, and in Aroer and its villages, and in all the cities that are on the banks of the Arnon, three hundred years, why did you not recover them within that time?' (Judges 11:26). Jephthah's claim of Israel's three hundred year occupation of the Madaba plateau from the days of Moses and Joshua (Numbers 21:24; Deuteronomy 2:24) challenges the Ammonites claim by simply asking: Why after all this time are you only now making this an issue?

The references to three hundred years of Israelite presence also allows for the establishment of an exodus-conquest date according to the internal storyline of Joshua and Judges. Although much controversy and explanation revolves around the 300 year reference, from an internal hermeneutical approach, Merrill states that 'there is no reason to take the three hundred years as anything other than an exact figure' (1987:172). Counting backwards within the internal storyline using the mentioned years of judgeships and periods of peace, still does not allow specific dating of the other judges because it is unclear if regional judges overlapped with one another. However, many scholars like the three mentioned in section 3.3.2, do make suggestions of dates. Taking these dates outside the storyline and putting them into an established historical time line is made by referencing I Kings 6:1 which describes Solomon starting the temple 480 years after departing Egypt. The majority of scholars, represented by Rainey & Notley (2006:168), Dever (2001:159), Mazar (1990:403) and others date the split of the Israelite monarchy after the reign of Solomon as occurring around 931/30 BC. This date is also based on internal storyline chronology back-tracked from an 'absolute' cross over date with Assyrian reference points of King Shalmenesar III's mention of the Israelite kings Ahab and Jehu (Thiele 1965:53-90).

This date is also connected with the Egyptian records of Pharaoh Shishak's campaign against Israel in the fifth year of King Rehoboam's reign (I Kings 14:25-26; Epigraphic Survey 1954: Southwest wall of the Karnak Temple).

Jephthah's role within society was similar to the 'Apiru described in the Egyptian literature of the Late Bronze Age (Rainey & Notley 2006:140) – a stateless individual who has gathered a band of men known for their valiant fighting. He had been expelled from Gilead because of his mother's heritage. But in need of a warrior-leader, the Gileadites recruited him to become their tribal leader (Judges 11:1-11).

After negotiations with the Ammonites failed, Jephthah launched his attack on Amman from Mizpah of Gilead and subdued the Ammonites with 'a great slaughter from Aroer to the entrance of Minnith, twenty cities, and as far as Abel-keramin' (Judges 11:33). All the candidates for these Ammonite cities are located on the eastern highlands between modern day Amman and the Wadi Mujib by the Anchor Bible Dictionary (ABD 1996). The location of Mizpah of Gilead is also unknown. There are a number of Mizpah's in the Bible and three are in the Gilead area: Mizpah (Genesis 31:49), Ramoth-mizpah (Joshua 13:26) and Mizpah of Gilead (Judges 11:29). Whether these are the sites of Jephthah's Mizpah is not clear. Mizpah of the Genesis account is most likely north of the Jabbok River (Achtemeier 1985, s.v. 'Mizpah'). Aharoni argues that Mizpah of Gilead must have been south of the Jabbok River between Heshbon and Mahanaim close or equal to Ramoth-mizpah (Aharoni 1979:265).

With the foreign threat of the Ammonites removed, internal conflict between the tribes of Ephraim and Gad surfaced. Similar to Gideon's episode in Judges 8:1, the Ephraimites came down into the valley, crossed at Zaphon and confronted Jephthah with threats of vengeance for not inviting them to the battle (Judges 12:1). This is the second account in which the tribe of Ephraim assumed a leadership role amongst the tribes (Gideon was the first account) with their 'assertion that no one had authority to go to war without inviting their participation' (Aharoni 1979:265). But not using Gideon's diplomatic skills to pacify the insulted Ephraimites (Judges 8:1-3), Jephthah responded with insults of his own and open conflict broke out ending in a great slaughter of Ephraimites (Judges 12:4-8). The seizing of the fords across the Jordan River by the Gileadites and their ability to separate out the Ephraimites who tried to cross by the pronunciation of the word 'shibboleth' shows that the valley was a barrier between the tribes of the east-west highlands (Judges 12:5-6).

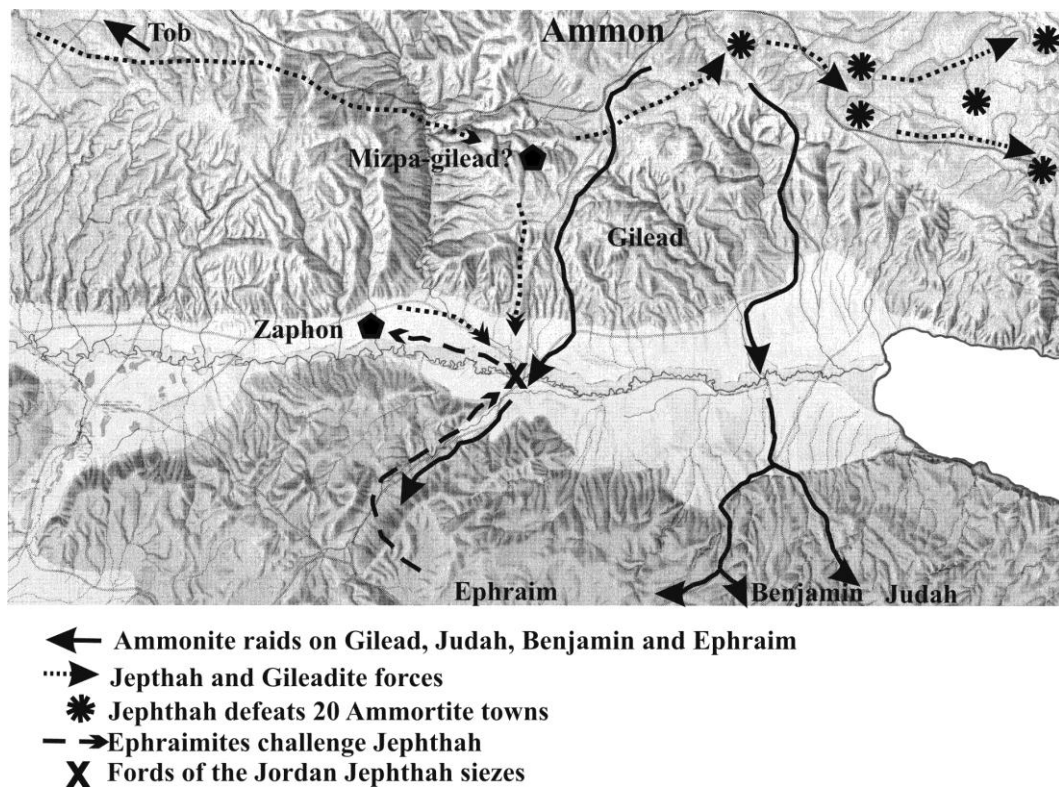


Figure 3.29: Jephthah's battle with the Ammonites and Ephraimites

The Amorites made military forays into Gilead and across the valley into Judah, Benjamin and Ephraim territory. The forces of Gilead gathered at Mizpah-gilead. Gilead called Jephthah from Tob as their leader. After negotiations with the Amorites failed, Jephthah attacked and defeated 20 Ammorite towns. Ephraim descended to Zaphon, challenging Jephthah's leadership. Jephthah calls on the Gileadites to seize the fords across the Jordan, trapping and then slaughtering the Ephraimites on the east side of the river (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.3.5.7 Othniel (Judges 3:7-11)

There is little information regarding the judge Othniel and the eight years that Israel was under the King Cushan-rishathaim of Mesopotamia. There are a number of attempts, which are briefly introduced in the *Anchor Bible Dictionary*, to identify King Cushan-rishathaim with a certain Arsu or Irsu, a Syrian ruler mentioned in Papyrus Harris 1/75: 1–9 (ANET 1955:260) or to define Cushan as part of Edom, not Aram, in order to associate it with the Midianites (ABD 1996, s.v. 'Cushan-Rishathaim'). However, all attempts to identify this ruler and his location remain speculative. The judge Othniel is listed as being the son of Kenaz, Caleb's younger brother (Judges 3:9). This clearly associates Othniel with the area around Hebron in the territory of southern Judah. And for the purpose of this study, the author's speculation is that Othniel had little to do with the Jordan Valley.

3.3.5.8 Ibzan, Elon, Abdon and Samson (Judges 12-16)

The remaining judges; the activities of Ibzan, Elon, Abdon (Judges 12:8-15) and Samson (Judges 13-16) do not shed any specific light on the Jordan Valley. Only Abdon, the son of Hillel from the town of Pirathon located in the territory of Ephraim, sheds possible light on the occurrences in the western hills. Pirathon is widely identified with modern Farata, six miles southwest of Shechem (ABD 1996, s.v. 'Pirathon'). Judges described the location as 'Pirathon in the land of Ephraim, in the hill country of the Amalekites' (Judges 12:15).

Rainey (2006:141) questions why a hill region in the land of Ephraim was called 'Amalekite'. Some scholars like Robert Boling suggest that the tribal borders between Ephraim and Manasseh were still not set and there was still some kind of Amalekite presence in the area (ABD 1996, s.v. 'Amalek'). Others believe that it simply refers to the Amalekite presence before Israelite occupation as Robert Smith argues (ABD 1996, s.v. 'Pirathon'). However, the Septuagint reads 'in the hill country of Ephraim, in the land of Shaalim.' There is not enough evidence to conclude whether this term is simply a reference to previous occupation or a statement of Amalakite/Ephraim/Manasseh ownership.

3.3.6 The Bethlehem Trilogy (Judges 17-21 and Ruth)

The last two stories in Judges and the book of Ruth are often referred to as the Bethlehem Trilogy because Bethlehem is a prominent feature of each narrative.

3.3.6.1 Micah and the Levite

The account of Micah and the Levite involving the migration of Dan is the last story in Judges and the first story in the Bethlehem trilogy. The account tells of a Levite from Bethlehem who was hired as a personal priest by Micah, an Ephraimite, to be the family priest in the hill country of Ephraim. The Levite gave a favorable prophecy to a group of Danite war scouts traveling north. Upon passage of the Danite war party, the Levite was hired to join them and became Dan's tribal priest in their soon-to-be conquered city of Laish, which is renamed Dan (Judges 17-18). There is no detail on the route that the group of traveling Danites took to Laish which is located

just to the north of the Huleh basin. The tribal war party could have easily passed through the Northern Jordan Valley, crossing the Jordan River and skirting the lower and upper Golan, or they could have stayed in the more difficult and concealing Galilean Hills after crossing the Jezreel. There is no detail in the account. The points that do add peripheral detail to the study of the Jordan Valley at this time are verses 7 and 28 of Judges 18:

Then the five men departed and came to Laish and saw the people who were in it living in security, after the manner of the Sidonians, quiet and secure; for there was no ruler humiliating them for anything in the land, and they were far from the Sidonians and had no dealings with anyone ... And there was no one to deliver them, because it was far from Sidon and they had no dealings with anyone, and it was in the valley which is near Beth-Rehov (Judges 18:7, 28).

The narrative refers only to Sidon as a potential spoiler to the Danite war party. Making a point from the silence of a text can be risky. But in this case, with the mention of distant Sidon, as the only potential adversary and the absence of any closer hostile cities leads to at least one conclusion – that there are not any opposing forces closer. The Canaanite cities of the Huleh basin and surrounding regions, led by Hazor, and which had projected power and influence into the Jezreel and Jordan Valley earlier in the narrative, are no longer an influence.

3.3.6.2 Benjaminite War

The second narrative of the Bethlehem trilogy is the account of the Benjaminite war whose catalyst was the rape and murder of a Bethlehem woman by Benjaminite men in Gibeah (Judges 19). The woman's Levitical husband rallied the other tribes to avenge and punish the perpetrators. The resulting battle, taking place in the highlands around Gibeah and moving east towards the wilderness, resulted in a massive defeat and slaughter of most of Benjamin (Judges 20). The victorious tribes regretted their almost total annihilation of Benjaminites and feared that Benjamin would not be able to recover and would disappear as a tribe. Part of their solution was to kidnap virgins from Gilead and give them to the survivors of Benjamin (Judges 21). Gilead is singled out as part of Benjamin's solution because the Gileadites had not responded to the Levite's call to punish Benjamin (Judges 21:5). Although Benjamin and Gilead territory touched at the Jordan River, Gilead did not respond to

their neighbor's call for help. The victorious tribes wanted to discipline Gilead's lack of participation in the tribal confederation. Gilead's absence and non-participation in the war party's oath not to give their daughters to Benjamin in marriage (Judges 21:7-9) was all the reason they needed to attack Gilead. Jabesh-gilead was chosen as the recipient of the groups' discipline. The city was attacked and all the inhabitants put to the sword. Only four hundred young virgins were spared. These women were brought back to Shiloh and given to the surviving men of Benjamin (Judges 21:10-14).

Although no reason is given, the narrative begins by demonstrating Gilead's unwillingness or disinterest in participating in an Israelite tribal call of action across the Jordan Valley at Mizpah. The other tribes had some expectations for Gilead's participation, but were they disappointed by Gilead's lack of response enough to result in their disciplinary military action if Gilead had not provided an easy solution for repopulating Benjamin? The emphasis of the narrative is on Gilead's failure to swear against giving their daughters to Benjamin and therefore provided a solution to maintaining a twelve tribe identity, even at the expense of destroying Jabesh-gilead. The story began with Gilead's lack of interest across the valley, but it ended with the strengthening of ties between Gilead and Benjamin across the Jordan Valley via intermarriage. The strength of these ties became even more evident in the following period of the Israelite monarchy. Saul's first recorded action after his coronation was to rush across the valley and deliver Jabesh-gilead from an Ammonite siege (I Samuel 11:1-11). At Saul's death, the men of Jabesh-gilead risked their lives to remove Saul's body from the walls of Beth-shan in order to give him and his sons an honorable burial (I Samuel 31:11-13).

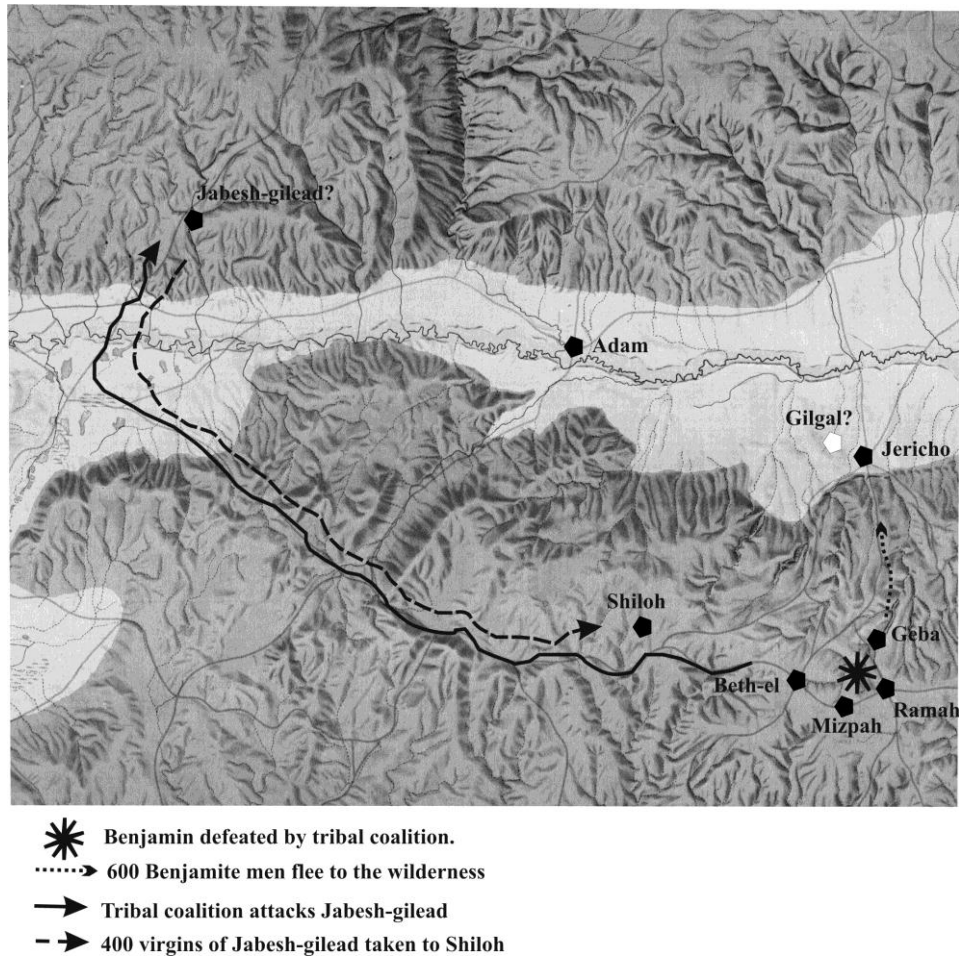


Figure 3.30 Benjaminite War

After Jabesh-Gilead's refusal to participate in the chastisement of Benjamin over the Levites concubine's murder, a coalition of western tribes attacked Jabesh-Gilead. 400 captured virgins from Jabesh-Gilead were then given to Benjamin, establishing a long lasting relationship between Gilead and Benjamin across the Jordan Valley (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.3.6.3 Ruth

The third Bethlehem trilogy narrative, Ruth, began and ended in Bethlehem. The author of the book places the story clearly in the period of Judges: 'Now it came about in the days when the judges governed, that there was a famine in the land. And a certain man of Bethlehem in Judah went to sojourn in the land of Moab with his wife and his two sons' (Ruth 1:1). According to the text, the story should be placed towards the end of the period of the judges because the main character, Ruth, is only three generations removed from David (Ruth 4:21-22).⁴⁷ Assuming that

⁴⁷ Assuming that the genealogy of Ruth 4:18-22 is "closed" and that Obed is the actual father of Jesse. There is a tension in the genealogy, of course, since an early conquest date of ca. 1400-1350 BC would place Salmon and Rahab, the parents of Boaz, as early as 1400 whereas David's birth can be no earlier

the story happened within the context of the judges' period, there are a number of geographical and social details in the story that relate to our study:

- The immigration of a family from Judah to the land of Moab. Geographically, the soil, climate and agriculture between Judah and Moab is very similar along this east-west line, providing a much more similar life style for the family than equal distances running north or south of Judah.⁴⁸ The Judean family's daily life style would be more familiar to them on the Madaba plateau than in the northern hill country or the Negeb.
- In just a short time and despite close proximity to Judah and a Mosaic Law forbidding the entrance of Moabite males into Israel's assembly (Deuteronomy 23:3), Elimelech's two sons took Moabite wives (Ruth 1:4). The cultural divide between Judah and Moab was easily overcome for marriage.
- Upon the death of all male members of the family, Naomi's release of her daughter-in-laws and desire to return to Judah, one Moabite daughter's (Ruth) adoption of the Judahite family was strong enough to permit her to leave her own cultural boundaries (Ruth 1:6-18). Ruth's relationship with her Judean mother-in-law was stronger than any fear of her immersion or acceptance into Judean society.
- Upon moving to Bethlehem, the Moabite woman was allowed to glean the fields alongside Judeans. The respected owner of the field, moved by Ruth's reputation, offered her protection and special status (Ruth 2). Ruth was judged and accepted into Judean society by her individual actions and not her Moabite ethnicity. The Judean field workers appeared to be familiar with Moabites and not acting with any special prejudice despite past generational conflicts between the two groups.

than 1040. This means that only three generations separate Salmon from David, a period of around 300 years. A conquest date of around 1250 would alleviate this tension but it would also create far more difficult chronological problems otherwise. Most likely the Ruth genealogy, like many others, is selective and retains only representative names (Merrill 1985:132).

⁴⁸ Taken from class lecture notes from a lecture given by Paul Wright, Jerusalem University College October 2001, Jerusalem.

- Naomi taught Ruth intimate cultural mores and acceptable behavior involving redemption and marriage. Upon exercising these Judean cultural practices, she was treated as a Judean and recognized by the tribal elders as Boaz's wife (Ruth 3-4). This was not the first time that the descendants of Judah welcomed a foreigner in as their own. Even the praises at Boaz's announcement of taking Ruth as his wife brought praises of 'May your house be like the house of Perez whom Tamar bore to Judah, through the offspring which the Lord shall give you by this young woman' (Ruth 4:12). Tamar being used in a Judean blessing is a notable example of another outsider being accepted through marriage into Israelite society. Tamar was a Canaanite woman whose story in Genesis 38 demonstrated the willingness of the Israelites to accept foreign-born wives into their lineage. Tamar and Ruth were not the only foreigners adopted into Judah. If one includes the genealogy of the Gospel of Matthew, Boaz was also the descendent of another Canaanite woman. His fore-father Salmon (see footnote 13 on proceeding page) married Rahab, the Canaanite prostitute from Jericho (Matthew 1:5). In the limited sources available, these two accounts of Canaanite or Moabite women, from in or across the Jordan Valley, were accepted into Judean culture and even rose to respected prominence within Israelite society. The valley did not represent a cultural barrier for these women.

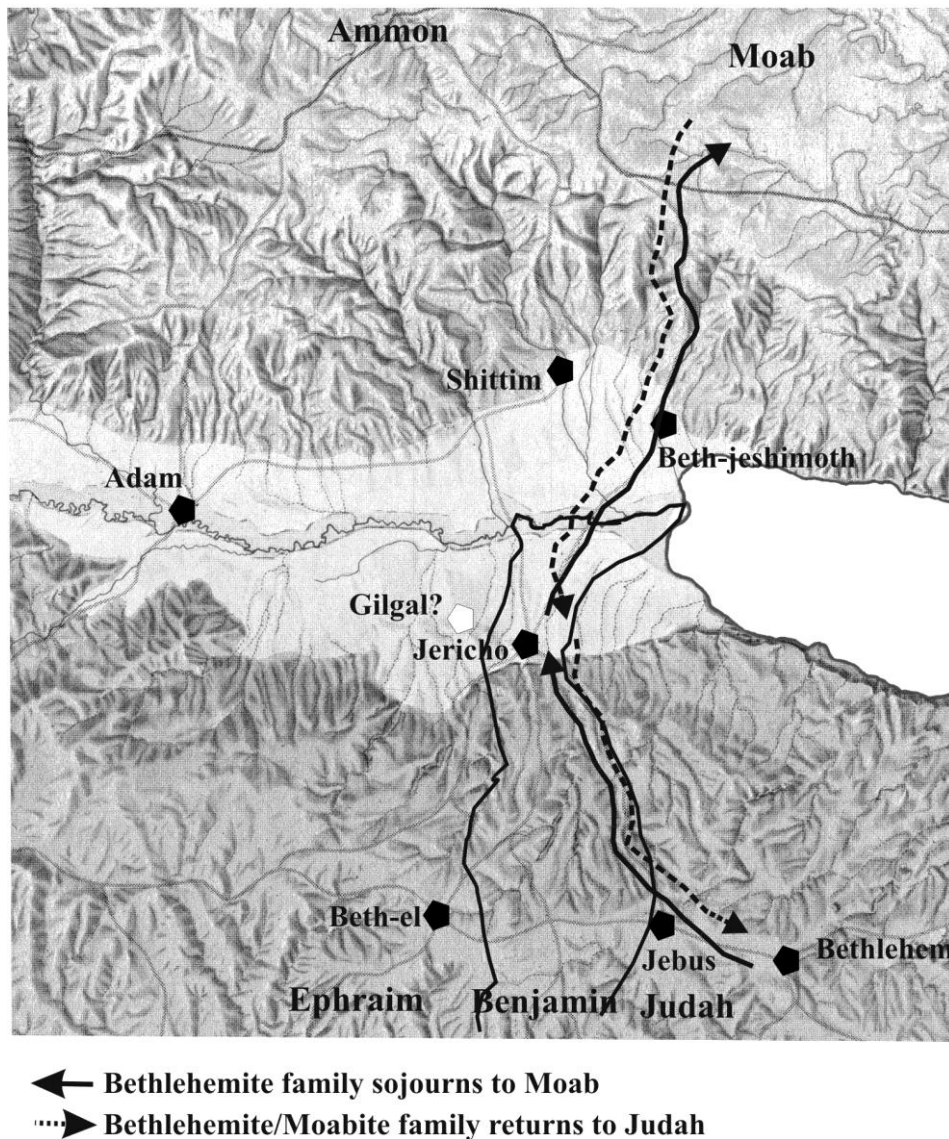


Figure 3.31: Migration of Naomi and Ruth between Judah and Moab

A family of Judah migrated to Moab. The family intermingled with the Moabites taking local wives. After all the husbands are killed, a Moabite widow returns with her Judean mother in law to Bethlehem where she is accepted into the tribe (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.3.7 Samuel

In the Biblical story line, Samuel is known as the last judge as well as the king maker, anointing both Saul and David as king over Israel. The majority of Samuel's life was geographically situated in the western highlands addressing the Philistine pressures from the west. Gilgal in the Jordan Valley was part of his traveling circuit in his administrative duties as judge (I Samuel 7:16; 10:8). It appears that Gilgal maintained some of its strategic importance as a political and religious center from the days of the conquest and settlement for it not only remained on Samuel's traveling circuit (I Samuel 7:16), but was the location for Saul's coronation (I Samuel 10:8; 11:14).

Samuel's life overlapped with the end of the period of the judges and the beginning of the Israelite monarchy with the lives of Saul and David. This transitional life is an appropriate place to end this study as there is no hard time boundary between the Late Bronze and Iron Ages. During the final days of the judges and dawning of the Israelite monarchy, two references of Egyptian individuals in the territory of Israel are found. Both are in the early life of David. The first reference is in regard to Benaiah, one of David's elite band of thirty warriors who is addressed in I Samuel 23:

Benaiah son of Jehoiada was a valiant fighter from Kabzeel, who performed great exploits. He struck down two of Moab's best men... And he struck down a huge Egyptian. Although the Egyptian had a spear in his hand, Benaiah went against him with a club. He snatched the spear from the Egyptian's hand and killed him with his own spear (II Samuel 23:20-21).

The other reference is to an Egyptian slave. While David was battling the Amalekites while living with the Philistines:

They found an Egyptian in a field and brought him to David. They gave him water to drink and food to eat - part of a cake of pressed figs and two cakes of raisins. He ate and was revived, for he had not eaten any food or drunk any water for three days and three nights. David asked him, "To whom do you belong, and where do you come from?" He said, "I am an Egyptian, the slave of an Amalekite. My master abandoned me when I became ill three days ago. We raided the Negev of the Kerethites and the territory belonging to Judah and the Negev of Caleb. And we burned Ziklag." David asked him, "Can you lead me down to this raiding party?" He answered, "Swear to me before God that you will not kill me or hand me over to my master, and I will take you down to them." He led David down, and there they were (I Samuel 30:11-20).

Both show that individual Egyptians are vulnerable in the southern Levant. But there is still prestige and awe attributed to one who would dare attack let alone kill an Egyptian.

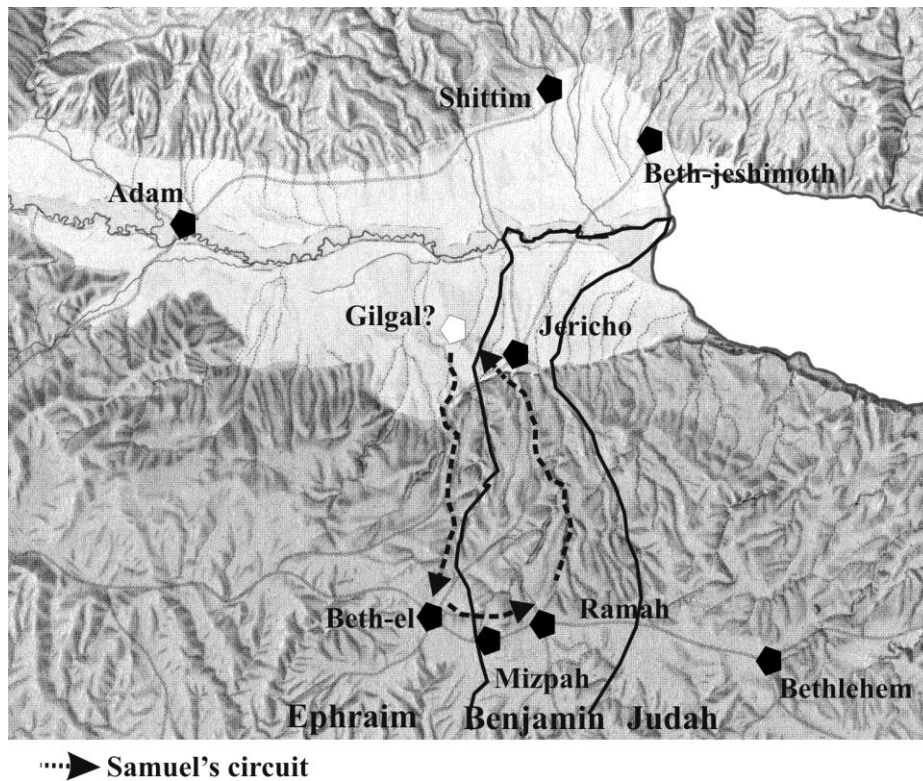


Figure 3.32: Samuel's circuit to Gilgal

Samuel was the last Judge before he anointed Israel's first two kings. During his judgeship, he habitually made a circuit from cities on the Benjamin Central Plateau and Gilgal in the Jordan Valley. Gilgal maintained a central administrative role from Joshua's conquest to the beginning of the Israelite kings (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

3.4 A PALESTINIAN INSCRIPTION: THE TELL DAYR 'ALLA SCRIPT

The only example of text not related to Egypt found in the Jordan Valley comes from Tell Dayr 'Alla.⁴⁹ Twelve tablets were excavated in a Late Bronze Age stratum by Franken in the mid 1980s and several more in the 1994-2004 seasons by Van der Kooij and Kafafi. Nine of the tablets are incised with small holes only. The other tablets are written in a clear readable but unknown script that has yet to be deciphered (Van der Kooij 1993). The two main schools on the identity of the script are 1) they are related to Aegean linguistic group and 2) they are related to Semites. Neither group bases their reasoning on linguistic evidence but on their understanding of the economic and political environment of Late Bronze Age Deir 'Alla (cf. Van der Steen 2004:17; Knauf 1987:14). If the undetermined script

⁴⁹ Three cuneiform tablets which are too badly damaged to read have been uncovered at Jericho (see 4.2.3.1) and Pella (see 4.2.1.3) that demonstrate their connectedness to the international correspondence network of the Late Bronze Age.

represents a local dialect, it would 'show a certain independence from the Egyptian overlords at the site at this specific time as the end of Egyptian hegemony drew to its close' (Strange 2008:304; see 4.2.2.1).

3.5 SUMMARY

The Egyptian and Biblical records present two halves of a story when dealing with the questions of whether the Jordan Valley was an integrated geographic/economic unit and to what extent the Jordan Valley interacted with the eastern and western highlands.

3.5.1 Was the Jordan Valley a single geographic/economic unit?

The historical record demonstrates a pattern of two divisions of the Jordan Valley, the Egyptian record of the north-central section and the Biblical record of the southern section. The Egyptian records dealing with the various campaigns of Pharaohs Thutmose III (section 3.2.1.4), Amen-hotep II (section 3.2.1.5 in Jezreel and eastern lower Galilee), Seti I (section 3.2.2.2), Ramesses II (section 3.2.2.3, Table 3.7), Merneptah (section 3.2.2.5) and the satirical scribe's itinerary of Papyrus Anastasi I (section 3.2.2.4) describe a direct presence in or movement through the Jordan Valley's northern section only (not the north-central section).

An Egyptian presence in the central section is suggested by both campaigning Pharaohs and select Amarna letters. The Transjordanian campaigns of Thutmose III (Late Bronze Age I) and Ramesses II (Late Bronze Age III) suggest military control over the Central Jordan Valley along the Wadi Zerqa routes between the eastern plateau and the Jordan Valley in order to protect their flanks and supplies. The topographical lists (from both campaigns) of conquered cites along the Transjordanian Highway of the eastern plateau and south of the Madaba Plateau suggest the necessity of Egyptian control of the central section of the valley and up the Wadi Zerqa (cf. sections 3.2.1.5; 3.2.2.3; Figure 3.3; 3.12). Several Amarna letters also suggest Egyptian control and the presence of at least administrative interests for grain supplies, tribute or security in the central section. EA 274 is a message from Queen NIN-UR.MAH.MEŠ complaining of the 'Apiru attacking Sabuma. If the identity of

Sabuma is identified with the Biblical Zaphon and if the suggested identity in the Central Jordan Valley (possibly Tell 'Ammata, Tell Sa'idiyeh or Tell Qos) is accepted (Albright 1943:9, 15-17; 1973:107; section 2.3.1.2), then the Canaanite queen is assuming that Egypt has a vested interest in this city and would be willing to respond to this event in the central section of the valley (section 3.2.1.9.6). EA 224, one of several letters from un-named cities written on clay originating in the Jordan Valley between Beth-shan and Wadi Zerqa (Goren et al 2004:236; cf. section 3.2.1.9.3-4) suggests an Egyptian allegiance (it is not clear whether voluntary or forced) in the central section. The ruler of the city, Shamhuna, acknowledged not only his debt of sending grain tribute to Egypt but the long history of his forefathers doing the same (cf. sections 3.2.1.9.4). The Egyptian records show that they had a presence in and control of the north-central half of the Jordan Valley. No Egyptian records are known that refer to the southern section of the valley.

The Biblical narratives of Numbers, Joshua, Judges, Ruth and the first part of 1 Samuel refer to an Israelite presence in the southern section of the Jordan Valley only (in regards to the Jordan Valley) except for two military actions, the accounts of Gideon and Jephthah. Upon arrival from their exodus sojourn, the tribes camped out on the Plains of Moab (Numbers 22:1) before crossing the Jordan to take Jericho. Once the Israelites crossed the Jordan River, they established their main military and political base at Gilgal, somewhere near Jericho to the east (Joshua 4:19). The Israelites maintained Gilgal as their main military base throughout the conquest of the western highlands (Joshua 9:6; 10:6-9, 15, 43; 14:6). The site remained a central gathering point for religious and civil purposes of the Israelites throughout the period of Judges until their first king was anointed (at Gilgal) and the political and religious center migrated into the highlands (Joshua 4:20; 5:10; Judges 2:1; 1 Samuel 7:16; 11:15). In the conquest narrative, no mention of the Central Jordan Valley is made. The reference to the north section of the valley (as well as the Jezreel Valley) is that the Canaanites stayed in possession of these lands. Although an account of a victory over the forces of Hazor is recorded, the Israelites were still unable to take possession of the valleys. So, even though parts of the valley were divided up and allotted to different Israelite tribes, there were areas that the Israelites 'could not

take possession of ... because the Canaanites persisted in living in the land' (Joshua 17:12; Figure 3.24). The sons of Manasseh even complained to Joshua that 'all the Canaanites who live in the valley land have chariots of iron, both those who are in Beth-shan and its towns and those who are in the Valley of Jezreel' (Joshua 17:18). Beth-shan remained an unconquered city (in the Israelite records) until after the death of Saul whose dead body was hung on its walls. The Biblical account records a divided valley between the northern and southern sections.

The central section of the valley is not clearly defined in the Biblical record. It falls within the allotment of Gad but when Gideon, in pursuit of the Midianites, requested help from Succoth (in the Zerqa Triangle, possibly Deir 'Alla, section 2.3.1.2.2) and Penuel (in the Wadi Zerqa), he was rebuffed. Both cities feared supporting Gideon as long as the two Midianite leaders were still alive, 'Do you already have the hands of Zebah and Zalmunna in your possession? Why should we give bread to your troops?' (Judges 8:6). This infers that the Israelites did not have control of the central section. The Midianites were free to penetrate through the Jordan Valley into the Jezreel Valley and beyond. Even when driven back by Gideon's forces, there was a fear of Midianite reprisals for those who aided the Israelites. Towards the end of the Judges' narrative in the account of Jephthah, it is not clear who had control of the central section of the valley. The Ammonite raids against the Israelites were focused on the eastern territories and penetrated into the western highlands through the central section of the Jordan Valley. The tribe of Ephraim came down into the valley, crossed at Zaphon and confronted Jephthah with threats of vengeance for not inviting them to the battle (Judges 12:1) (Zaphon appears to be under Gileadite control but it is unclear if it is a Gileadite city or not). In the ensuing conflict between the two tribes, the Gileadites seized control of the fords across the Jordan (which were located in territory already allotted to them (sections 3.3.4.1.6 and 3.3.5.4). The Biblical narrative does not describe who was occupying the Central Jordan Valley during this period. The focus of the narratives are on the forces from either the eastern highlands (Midianite, Ammonite and Gileadites) and western highlands (Israelite tribes) passing through the Central Jordan Valley, taking control of the fords but being resisted by the local cities. Although a similar situation, of

Moabite and Israelite conflict, occurred in the southern section between Moab and the Israelite tribes, a clear Israelite presence was maintained at Gilgal and the Moabites were presented as occupiers 'who defeated Israel, and they possessed the city of palm trees' (Judges 3:13) while Jericho's ownership moves back and forth between Israelite and Moabite.

The accounts of Gideon and Jephthah only traverse the northern and central section in the context of marauding Midianites and Amorites descending from the eastern highlands and penetrating into the west across the valley. The western Israelites descended from the highlands and pursued the marauders back into the eastern plateau. The focus of these two accounts in the north and central sections is the pursuit and conflict between two highland populations as opposed to the southern section when Moab (under Eglon) is said to take possession of Israelite land when Eglon occupied Jericho.

Although the Biblical narrative in Numbers 34 uses the Jordan River, between the Sea of Galilee (Chinnereth) and the Dead Sea (Salt Sea), as a clear physical boundary marker (Numbers 34:2-12; 35:10, 14) delineating Canaan on the west from the lands of the east and the territorial allotments for the tribes bordering the central and southern sections of the valley, the Jordan River was used as a divider (both sides of the northern section were allotted to Manassah). The primary division of the Jordan Valley was between the Canaanite north and the Israelite south. The central section was an unclear transition zone of unreliable allegiance.

3.5.2 The extent of the Jordan Valley interaction with the eastern and western highlands

Regarding the question of the Jordan Valley's interaction with the eastern and western highlands, the historical record of both the Egyptian and the Biblical accounts demonstrate a strong integration of the Jordan Valley with both the eastern and western highlands. The campaigns of the Pharaohs clearly demonstrate the main international routes through the northern section. Thutmose III's topographical list from Karnak Temple pylons six and seven lists a series of cities in the Jordan Valley, Pella, and Kinneret on the southern shore of the Sea of Galilee and

Beth-shan, Anahaarth (Tell Mukkarkhash) in the eastern lower Galilee, a number of cities long the Yarmuk Canyon ridge route leading through the Bashan towards Damascus and then south along the Transjordanian Highway (section 3.2.1.4; Table 3.1). Seti I's campaign towards the end of the Late Bronze Age followed an almost identical route (section 3.2.2.2; Table 3.6) as did a campaign of Ramesses II in his real year eight in order to put down a rebellion in both the Galilee and the eastern highlands (section 3.2.2.3). The letter from the satirical scribe of Papyrus Anastasi I of Late Bronze Age III also maps out an Egyptian route from Mount Carmel to Shechem, to Hazor via several cities in the Galilee and then through the Beqaa' valley before looping south-east to the Bashan and then descending into the northern section of the Jordan Valley, fording the Jordan River and passing Rehob, Beth-shan, and Tarqa-El before exiting into the Jezreel Valley to Megiddo (see 3.2.2.4; Table 3.8). The Egyptian campaigns and scribal letter integrates the Northern Jordan Valley along with the eastern highlands along the Transjordanian highway, the Bashan and Damascus plateau, Hazor in the Huleh basin, the Jezreel Valley, the coastal plain and Shechem.

The Taanach and the Amarna letters show a clear interaction between a number of regions surrounding the Jordan Valley:

- *Rehob and Taanach in the Jezreel Valley*: Taanach letter 2 specifically connects Rehob and Taanach as the ruler of Taanach requested not only military supplies from Rehob but said 'Furthermore, command your towns that they carry out their work. Everything that is produced in the towns is my responsibility. Now behold me that I will do good to you' (Taanach letter 2 translated by Rainey & Notley [2006:76]; see also section 3.2.1.7). This letter shows that the towns under the control of Rehob in the Beth-shan Valley were under the administration of Taanach in the Jezreel Valley. The end of the letter also proposes a marriage alliance between the two ruling families.
- *Beth-shan with Akka on the coast and east with Damascus*: Amarna letters 232, 234 and 235 were written by the ruler of Akka (modern day Acco on the coast) on clay originating around Beth-shan. The ruler of Akka defended himself against harboring the Egyptian outlaw Biryawaza from Damascus in

EA 234. EA 289 is also from Akka and reported sending troops to help garrison Beth-shan (section 3.2.1.9.4).

- *Beth-shan with Jerusalem*: EA 285 is a letter from Abdi-Heba of Jerusalem written on clay from around Beth-shan. Jerusalem was performing Egyptian administration details at Beth-shan (section 3.2.1.9.4).
- *The northern valley's politics were connected with those of the Damascus Plain, Lower Galilee, the Jezreel Valley, the Coastal Plain and the western highlands*: The collection of letters involving the Labay'u and sons' affair (EA 237, 244, 245, 246, 250, 252, 253, 254, 255, 280, 287, and 289) reveals a web of political intrigue centered in Shechem but involving the whole region. EA 249 complains about an alliance between Shechem and Gezer that was threatening the Jezreel Valley. EA 255 and 289 reveal that Pella was also supporting Shechem and Gezer. EA 250 suggests that Damascus' move against Pella was to take Pella's support away from Shechem. EA 255 is Pella's defense of not interfering with trade caravans up on the Damascus Plateau. EA 256 is Pella's denial of harboring an Egyptian fugitive from Ashtaroth (Tell Ashtara) in the northern Bashan. EA 364 reveals a conflict between Pella and Hazor over several cities in the Golan (cf. section 3.2.1.9.4).
- *Damascus and Bashan with Egypt through the Jordan Valley*: EA 200-210, 241, 334, 336, 337 and 364 are a collection of letters originating from the Bashan and Damascus areas. Each of these letters declares their loyalty to Pharaoh and their preparations of support for an upcoming campaign (see 3.2.1.9.5).
- *The western highlands with the central section of the Jordan Valley*: EA 274 written by Queen NIN-UR.MAḪ.MEŠ somewhere in the western highlands or Shephelah warns Pharaoh that Sabuma (in the central section of the valley) has fallen to the 'Apiru (see 3.2.1.9.6).

3.5.3 Biblical connections

The Biblical narratives of Numbers, Joshua, Judges, Ruth and the first part of I Samuel reveal a number of connections between the eastern and western highlands

centering on the southern section. After wandering in the wilderness, Numbers 21 relates the Transjordanian conquest of the eastern highlands from the Arnon to Bashan. The twelve tribes 'then the sons of Israel journeyed, and camped in the plains of Moab beyond the Jordan opposite Jericho' (Numbers 22:1). From camping at the foot of the eastern escarpment in the southern section until the time of Samuel (the last Judge and anointer of King Saul and David), the Biblical record describes a number of connection points between the Jordan Valley, the highlands and regions beyond:

- *The Plains of Moab and Jericho with northern Syria and the Euphrates:* The leaders of Moab and Midian brought in a prophet from Pethor (Balaam) to curse the Israelites as they camped on the valley floor (Numbers 22; Snaith 1967:287; section 3.3.4). Pethor is 650 kilometers (400 miles) north on the Syrian Plateau, just under 100 kilometers (62 miles) north-east of Aleppo, Syria. A second reference to the southern section of the valley having connections with the Syrian Plateau comes in the wake of the defeat of Jericho when Achan took a 'beautiful mantle from Shinar' (Joshua 7:21) as booty. Shinar is a region along the Euphrates running between Babylon and the Persian Gulf (ABD, 1996 s.v. 'Shinar').
- *Jericho and the Plain of Moab with the Madaba Plateau/Bethlehem in the western highlands with the Madaba Plateau via the southern section of the Jordan Valley:* Before crossing the Jordan and setting up their main administrative center at Gilgal, the Israelites began to intermingle with the Moabites, intermarrying and participating in their religious practices (Numbers 25). Eglon, the King of Moab, made an alliance with Ammon. They invaded the southern section of the valley and set up an administrative center at Jericho. Ehud led an Israelite force that descended from the western hill country with a coalition of forces from Ephraim, Benjamin and Judah, defeated Eglon and controlled the fords of the Jordan (Judges 3:12-30; section 3.3.5.1). The book of Ruth demonstrates connections between the Madaba Plateau and the Bethlehem area through the Jordan Valley. Israelites migrated from Bethlehem to the Madaba Plateau and intermarried with the

Moabites and returned to the western highlands with their Moabite in-laws (Ruth; section 3.3.6.3).

- *Gilgal (and the Southern Jordan Valley) with the Madaba Plateau and western highlands*: The Israelites ascended to Ai and their first campaign was Joshua's southern campaign of conquest which was restricted to the southern highlands and Shephelah as well as parts of the Negev (Joshua 7-10). Gilgal was the Israelite chief base of military and political operations throughout the conquest of the western highlands (Joshua 9:6; 10:6-9, 15, 43; 14:6). It remained a central gathering point for religious and civil purposes throughout the period of Judges (Joshua 4:20; 5:10; Judges 2:1; 1 Samuel 7:16). Israel's first king was crowned at Gilgal (I Samuel 11:15). Gilgal's strategic nature in the Southern Jordan Valley provided quick access to the western highlands (Joshua 10:7) as well as the southern fords across the Jordan River and the eastern highlands (I Samuel 13:7). King Eglon of Moab used Gilgal as a base for governance over the Israelites immediately before the time of the judge Ehud (Judges 3:19). Gilgal remained a key location in the life of the Israelites in the later periods of the United and Divided Kingdoms, not only for its strategic location but as a social and religious barometer of the nation (2 Kings 4:38; Hosea 4:15; 9:15; Amos 4:4).
- *Beth-shan with the Lower Galilee around Beth-Anath (Albright 1921:57)*: This is a weak inference based on the judge Shamgar, son of Anath, who defeated a group of Philistines (Judges 3:31). Aharoni relates the reference to the Philistines to the probable population of Sea Peoples at Beth-shan (Aharoni 1979:227-228; section 4.2.1.1; section 3.3.5.2).
- *Northern Jordan Valley with the Lower Galilee and Hazor*: The battle between Barak and Sisera under the judgeship of Deborah took place in the Jezreel Valley near Mount Tabor. Upon defeat, Sisera took flight across the Kokhav Plateau, presumably towards the Nahal Jabneel where he could descend into the valley and continue his escape north. He was killed by the Oak of Zaannim near the Nahal Jabneel on the border between Issachar and Naphtali (Judges 4-5; section 3.3.5.3). The tribes of Issachar and Naphtali both had allotments descending from the escarpment of the Lower Galilee to the Jordan River

(Joshua 19:17-23; 32-34). Issachar had a very small portion of territory, and most of it was lowland territory in the Jezreel Valley and around Beth-shan which was still under Canaanite control at the time of allotment (Joshua 17:16). According to the narrative, Issachar and Naphtali participated in group actions with the other Israelite tribes involving the Jordan Valley, but no activities other than Sisera's flight, are recorded involving the Wadi Jabneel and Tavor routes into the valley.

- *The central 'waist' and Beth-shan Valley with the eastern highlands, the coastal plain, Lower Galilee and the Ephraim Hills of the western highlands:* In the account of Gideon, the Midianites with the Amalekites and other 'sons of the east' descended from the eastern highlands to capture produce and livestock as far as Gaza (Judges 6:3-5). Gideon attacked the Midianites in the Jezreel Valley and pursued them past several sites in the Beth-shan Valley, across the Jordan, past Succoth in the central 'waist' and up the Wadi Zerqa (past Penuel) and eastward towards Karkor on the eastern plateau. The tribes of Naphtali and Asher from the Galilee and Ephraim from the western highlands joined Gideon in pursuit of the Midianites (Judges 6-8; section 3.3.5.4). Although this account clearly shows both western and eastern connections to the Beth-shan Valley and the central 'waist' section, it is unclear who was living in the central 'waist'. The population of Succoth and Penuel's (in the allotted territory of Gad) refusal to help Gideon reflects a disunity with the western tribes (Judges 8:6).
- *The central 'waist' with the whole of the eastern highlands (Tob, north east of the Bashan, Gilead, Ammon and the Madaba Plateau) and the western territories of Benjamin, Ephraim and Judah:* The account of Jephthah reflects interaction amongst all these areas. The Ammonites descended from the eastern highlands and raided Benjamin, Ephraim and Judah territories on the western side. The Gileadites called on Jephthah, who was in exile in the land of Tob. Jephthah returned, negotiated with and then defeated the Ammonites. Ephraimite forces argued with Jephthah in the Zerqa Triangle before being massacred by Jephthah forces as they tried to cross the Jordan westward (Judges 10:6-12:7; section 3.3.5.6). This account also shows the

limited unity of the western and eastern Israelite tribes as they battled amongst themselves once their common enemy was dispatched. Their differences were not only political but the Jordan Valley had created a divide between the tribes allowing different linguistic accents to develop as seen in the pronunciation of the word 'shibboleth' (Judges 12:5-6).

- *The central 'waist' and Beth-shan with Gilead and the western highlands:* The Benjaminite war left the tribe of Benjamin near extinction. Since Gilead had not participated in the call to arms against Benjamin (another example of disunity amongst the Israelite tribes, with the 'rift' of the Jordan Valley probably playing some role), it was singled out by the other tribes to be the target of a mass kidnapping of virgins. The western tribes descended from Bethel, crossed the central 'waist' and kidnapped 300 virgins from Jabesh-gilead for Benjamin (Judges 19-21; section 3.3.6.2). This account of Gilead's refusal to participate in the western tribes' conflict demonstrates disunity across the central 'waist.' It resulted in strong 'inter-marriage' ties across the valley. This resulting connection between Gilead and Benjamin across the central 'waist' is exhibited at the death of Saul when the men of Jabesh-gilead made a night raid on Beth-shan to retrieve Saul's body (I Samuel 31:11-13).
- *West side of the southern section of the valley with the western highlands:* The tribal allotments of Ephraim extended from the Jordan River near Jericho into the western highlands through the hill country around Bethel (Joshua 16:1-4). Benjamin's allotted territory extended from the Jordan River to the north side of Jericho and up westward to the Central Benjamin Plateau in the western highlands (Joshua 18:11-28) (cf. section 3.3.4.1).
- *East side of the southern section and parts of the central 'waist' with Gilead and parts of the Madaba Plateau:* The tribal allotment of Gad appears to be the entire floor of the eastern Ghor from Tell Nimrin and north towards the Sea of Chinnereth (Joshua 13:24-28). This would include the Wadi Zerqa and the secondary routes up the eastern escarpment to the south. It is unclear how far into the central 'waist' section the tribe actually penetrated in its early occupation, but later, the accounts of Gideon and Jephthah show that

the Israelites used these routes. The allotment to Reuben was primarily on the Madaba Plateau with a sliver of territory descending the slopes of Pisgah to the Jordan River (Joshua 13:15-23; c.f. section 3.3.4.1.6).

- *General western and eastern highland connections across the valley:* It is worth noting that, although no Levitical cities or cities of refuge were established in the Jordan Valley, the cities were evenly divided between the eastern and western highlands (see 3.3.4.1.8; Figure 3.22). Three cities of refuge were on each side, one in each section (north, central and south) of each side. In setting up and administering the six cities of refuge, the difficulties of access that the geography of the valley could present are purposefully overcome. For residents in the valley, three of the cities (Shechem, Bezer on the Madaba Plateau and Ramoth in Gilead) would be the easiest to access (Numbers 35:10-14; Joshua 20-21; c.f. section 3.3.4.1.8).

The historical record is not always clear who was residing in the Jordan Valley; Canaanites in the north, Canaanites, Israelites and Moabites in the south and unidentified groups in the central 'waist'. It is clear that the population of the Jordan Valley had considerable interaction with both the eastern and western highlands, the lands of the coastal plain, the eastern lands immediately beyond the highlands and the lands further beyond – Egypt and Mesopotamia.

CHAPTER 4: ARCHAEOLOGY OF THE JORDAN VALLEY

4.1 INTRODUCTION

This chapter will review the preliminary and final reports of archaeological excavations in the Jordan Valley and a few selected sites in the eastern and western highlands that identified Late Bronze Age occupation levels. A brief review of some key excavations without identified Late Bronze Age strata are also included because the absence of such discoveries (at present) is notable in reference to their geography, survey material and the historical record. Unfortunately, a large number of excavation reports have yet to be published (even decades after the excavations) or the Late Bronze Age levels are only perfunctorily mentioned as the excavators' foci are on other strata at the sites. Fortunately, a number of large excavations in the Jordan Valley are currently in process: The University of Sydney excavation continues to reveal excavations of the large Late Bronze Age temple complex at Pella; Tell Rehob is revealing copious amounts of material from the Iron Age strata while each dig season comes closer to the underlying periods; Trinity Southwest University and the Jordanian Department of Antiquities are starting a seventh season at the massive Tell el-Hammam and surrounding hills on the 'Plains of Moab' and an Italian team is digging in new areas at Jericho. Negotiations are also in progress for a Canadian project to do a multi-season expedition at Tell Adam/Damiyeh.⁵⁰ Updates and reports for these projects are eagerly anticipated.

The archaeological reports will be examined with the following two questions in mind:

- Was the Jordan Valley an integrated political/economic unit?
- To what extent was the Central Jordan Valley interacting with the eastern-western highlands and the larger region during the Late Bronze Age?

⁵⁰ Personal conversations with Hussein Jarrah, Director for Jordan Valley, Jordan Department of Antiquities, May 28, 2010.

In reviewing the reports, the focus is on highlighting the Late Bronze Age strata. The artifactual parallels in other site reports are summarized and placed into three categories:

1. International connections: Parallels that infer interaction with Egyptian, the Aegean (via the port at Abu Hawam) or the northern Levant.
2. Regional connections: Parallels that infer interaction with the eastern and western highlands, the Jezreel Valley and the coastal plain.
3. Local connections: Parallels that infer connections with sites located in the Jordan Valley. Local is defined by the geographical description of the Jordan Valley. In daily living, local could have a completely different reality as sites in the Beth-shan Valley could easily consider sites in the eastern Jezreel or northern Samarian hills as 'local neighbors' much more so than those in the Central Jordan Valley across the river or particularly of those in the southern section across parts of the swampy and/or sterile plains of the Ghor.

The assumption is that specific parallels of artifacts (mainly ceramics but also metal, glass and architecture) demonstrate, at a minimum, some degree of interaction and connectedness between the people of the parallel sites. Large general parallels such as the appearance of Migdol temples, general types of burials or pottery may be mentioned in the general excavation report but not in the international, regional or local parallels. As they are broad regional and cultural markers, 'drawing conclusions from the presence or absence of different vessel shapes on a site is a dangerous pursuit' (Van der Steen 2004:129). It must be remembered that sites may only be partially excavated and published reports are often incomplete. Early excavations did not have the benefit of regional pottery sequences worked out and developed by Amiran (1969) and others, especially for the relatively new repertoire of the Transjordan pottery styles. Therefore, only observations on the larger numbers of artifact types and styles that parallel each other at different sites are listed. Only

specific, generally small scale, unique parallels are recorded. In keeping with the survey level of this thesis, the list of parallels for each site is not comprehensive. Often, just one or two samples (out of a dozen ceramic types) are listed as parallels in order to make the point of connection but not to get bogged down in a myriad of technical pottery description points. The goal is to show the variety of connection points but not necessarily the quantity of connections to any one site. Future studies could/should include a more detailed study of the amounts and types of parallels to see if a degree of connection between two sites could be measured. With the inherent nature of limited excavation size and choice of square placement, the danger of inferring a connection between two sites based on a few items that could be unique and extraneous to the site is clearly present.

These parallels depend totally on the excavators and their critics for the ceramic and artifactual analysis. Some of the reports (usually the older ones), tend to report their ceramic finds in terms of parallels with other sites. This has been helpful but, by simple chronology, these excavators did not have access to the latest dig finds. Some of the new digs make an effort to draw parallels but, in the vast majority of the newer excavations, only preliminary reports are available which are more descriptive of form, production technique and dating and leave the parallels for the final report analysis (which may yet to be published). Still, a large amount of data has been gleaned that reveals an intricate network of connections between and through the Jordan Valley, neighboring highlands and international points. The most recent excavations from Irbid, Tell Fuhkar and the Sahem Tomb (which Glueck and other scholars of the mid-20th century considered sparsely populated – at best, in the Late Bronze Age) are proving to have large fortified urban settlements in this period with clear interactions with the Jordan Valley. The dozens of unexcavated tells within a short radius of these sites can only add further depth and breadth to the established network demonstrated in the following pages.

4.1.1 Mapping artifactual parallels

For each major excavation, a map with connecting lines between that site and other sites with artifactual parallels visually represents probable interaction between these

sites. The lines are straight between the two sites and do not follow the trade routes established in Chapter 2. One may assume, but not in every case, that interaction would be along the closest or easiest route to travel between the two sites. The straight line can be misleading in inferring that the parallels between the sites were by direct interaction. This cannot be assumed as some artifacts would clearly go to regional and local trade centers before being distributed to smaller trade units. Figure 4.4 showing connections between sites with Mycenaean and Cypriot pottery, assumes that the pottery (first entering the southern Levant at the coastal site of Abu Hawam) would first connect at large regional urban (trade) centers such as Beth-shan and Rehob before moving on to other centers, such as Deir 'Alla, and eventually reaching the eastern highland plateaus. Therefore, the Mycenaean pottery connections between Rehob and the Beth-shan Valley are not a straight line to the site called the Amman Airport building site, however, the majority of map markings on other types of artifacts do make direct connections. This could be misleading. This author is not claiming that the Madaba Plateau had direct interactions with Pella and Beth-shan. However, these parallels demonstrate a network with intermediate sites that integrated the eastern highlands with the Jordan Valley and points beyond.

4.1.2 Artifactual use as date markers and points of connection

The chronology of connection points cover the full period of the Late Bronze Age. In the summary of this chapter, general observations between site interactions in the various divisions of Late Bronze Age I, II and III (or Late Bronze Age I, IIA or IIB depending on the excavator) can be made because in the 350 years between the beginning and the ending of the Late Bronze Age, there are some artifacts that are defined to specific time frames or locations.

In the early Late Bronze Age, cooking pots had a flaring rim before changing to a vertical, folded ridged rim in the latter half of the Late Bronze Age. At some sites like Deir 'Alla, the folded ridged rim is exclusively used in the Late Bronze Age Phases F-G and Iron Age Phase A. At Pella, this style appears in the Late Bronze Age II strata alongside the earlier flaring triangular rim ware. These types of cooking vessels have

only been found in the Jordan Valley, exclusively on the east side with the exception of findings at Beth-shan. Other types of pottery such as open bowls with painted concentric circles inside, with or without (most often with) a white slip have a broader circulation up into the eastern and western highlands (cf. Van der Steen 2004:130; Dever 1995).

In general, artifact types and styles change slowly. Most overlap generally used outlines of year markers for the Late Bronze Age divisions. One type of marker may vanish and give way to a new one at one site but continue on at another site for a time. This is especially true in the Middle Bronze Age/Late Bronze Age transition. Chocolate-on-White ceramic ware is a classic example (see Figures 4.1 and 4.2). It is used as a general marker for the Late Bronze Age I in the Jordan Valley although it first appears at the close of the Middle Bronze Age. When found at sites like Deir 'Alla, Hammeh and the Baq'ah Valley supported by other Late Bronze Age material, it adds clear support for the chronology of the strata. When found at sites like Jericho in a mixed stratigraphy of Middle Bronze and Late Bronze Age material, it acquires a more general chronological value. Other pieces, such as cooking pots with an internal folded lip, are restricted to a certain period (Amiran 1969:135). Simple round-sided bowls with concentric circles painted on the inside (generally confined to the latter half of Late Bronze Age I) (Dothan 1971:81 and Yadin 1972:32) or Egyptian two-handled *amphora* were used only in the time of Seti II to Twosret (Mazar 2006:151-152). Still other types suddenly appear with a distinctive style and slowly change as they spread out. Two examples are:

- A distinctive form of chalice with an outward pointing rim that turns obliquely down in a fold. This form was first noticed at Deir 'Alla where it appears in a new 13th century stratum and then spreads out as it appears in later adjacent periods at sites such as Tell Sa'idiyeh, Pella, Rehob, Beth-shan, Hazor, Dan, Taanach, Megiddo and Tell Abu Hawam – all in a Late Bronze/Early Iron Age transition strata (Grutz 2007:11-12). Similar chalices with slight changes in style appear at these same sites and others, but in later

strata, demonstrating both a change of style over time and geographic movement.

- The 'Manasseh bowl' type appears in great numbers in the territory of Manasseh during the Early Iron Age but it is first found in Late Bronze Age contexts (at Pella and Deir 'Alla Phase D) on the eastern side of the Jordan River (Van der Steen 2004:131).

Both of these examples can be used to show interaction between sites by either a migration of people or, at a minimum, a growing preference of a particular style or manufacturing method.

When a new style or production technique first appears in a new stratum (especially after a destruction layer) it is easier to use as a marker associated with a specific event or time. However, most changes are slow and allow for establishing a chronology for a general time frame with flexible boundaries. Common, everyday ceramics are the slowest to change yet still allow for accurate dating. The common convex round bowl is found throughout the time period in large quantities and is a commonly used marker in the reports reviewed below. Generally speaking, the Middle Bronze and early Late Bronze Age bowls have straight wall contours or gently convex-profiles and are fairly shallow. Moving into the Late Bronze Age I, the bowls become higher with a pronounced ring profile. During Late Bronze Age II, the wall contours are often more convex and the ring bases lower. Although there are exceptions, these bowls follow a consistent trend for setting Late Bronze Age divisions (Fischer 1997:28-29).

Late Bronze Age IIA and IIB pottery displays a clearer distinction than Late Bronze Age I. The other transition periods are more difficult. In general, Late Bronze Age I ceramics are a continuation from the end of the Middle Bronze Age, the division between the two periods being based on Egyptian political and military activities rather than clear material changes. Middle Bronze Age forms continue into the Late Bronze Age while slowly changing shape. The heavy carination on bowls and chalices changes in favor of softer, rounder lines. Other characteristic shapes (e.g. barrel juglets) disappear by the Late Bronze Age II and new forms enter the repertoire

(Cypriot bilbils and Syrian flasks become common) and by late Late Bronze Age II, local imitations of these and other imported ceramics by local potters are widespread.

Separation of the Late Bronze Age I period into IA and IB is 'simply fuzzy and preliminary' (Fischer 1997:18-19) and no attempts to define this separation have been made. Late Bronze Age II is usually divided into two periods, IIA and IIB. Late Bronze Age IIA was a relatively peaceful and prosperous time in the Jordan Valley (despite the local turbulence of the Amarna period). Late Bronze Age IIA strata have imported goods from Mycenaean areas (Late Helladic IIIA1-2 pottery) and Cyprus (Late Cypriot II1-2 pottery such as White Slip II and Base Ring II wares) (Astrom 1972:431-471). Egyptian and north Syrian wares are also found in large quantities west of the Jordan River, but more sparsely in Transjordan (Fischer 1997:19-20). The Late Bronze Age IIB has a similar repertoire to that of Late Bronze Age IIA. The local ware is of the same tradition but appears more mass produced and lower in quality with less carefully applied decorations than the previous period. Locally produced imitations of foreign imports (mainly Mycenaean pottery) began to dominate (Fischer 1997:20; cf. Amiran 1970:124-190; Prag 1985:154-165).

The pottery transition from Late Bronze Age IIB to the Iron Age is problematic as the change differs from one region to another and often from site to site in one single region. At Deir 'Alla, after the destruction level of Late Bronze Age Phases G and H (at the end of the 13th century), a new pottery style suddenly emerged in Phase A of the Iron Age (Homes-Fredericq & Hennessy 1989a:202-205). At Pella, the 13th century continued much as the 14th century with only a slight decrease in economic prosperity. New Iron Age material including 'Philistine' painted pottery does not appear after a 12th century destruction level (cf. Homes-Fredericq & Hennessy 1989b:406-423; Van der Steen 2004:42-43). So even at a local level, ceramic parallels are represented in a general time frame, overlapping age divisions and dates. The differences could be due to the movement of people or simply more 'conservative potters in more isolated sites being slower to change' (Fischer 1997:21).

In addition to Amiran's 1969 monumental work identifying and dating pottery, a relatively new analysis tool has been developed for ceramics. Various kinds of physicochemical methods including neutron activation analysis and chemical composition analysis allow for the ceramic material to be matched with its point of origin, the assumption being that the ceramic pottery was made close to the source of the clay. This tool has been used extensively with the Amarna letters (see 3.2.1.9.4) to identify possible sending cities of tablets that are not mentioned on the tablet itself. The Old World Data Bank for clay analysis continues to grow. Currently, the Jordan Valley has many clay samples in the database for areas around Abu Kharaz, Sa'idiyeh, Kataret Samra, Pella and Jericho. Samples from Umm Dananir, Rumj Hen and the Amman Citadel for the Baq'ah alley and Amman Plateau are also listed for comparison purposes (McGovern 1997:422-423). This tool allows for distribution mapping of ceramics from clay samples that are in the data bank. Ceramic compositional analysis has identified that Chocolate-on-White ware was produced by only two or three sites (areas near Tells Hayyat and Abu Kharaz in the northern Jordan Valley and in southern Lebanon) during the Middle and early Late Bronze Age periods (Knapp 1989:130-137; <http://www.jstor.org/pss/1357613> accessed December 4, 2011).

The interpretation and dating of material in the Middle Bronze III to Late Bronze Age IA transition period is one of recurrent controversy. Artifacts, especially ceramics, are ascribed a Late Bronze Age date at one site by a scholar and a different scholar will assign an identical piece at a different site a Middle Bronze III date. The length of this transitional period which can vary from site to site, could easily be a generation or more (cf. Fischer at <http://7icaane.org/w3jordan.html>). Therefore, artifactual parallels that overlap the Middle Bronze and Late Bronze Age periods are included in the review of the individual site reports and suggested site connections with an understanding that the dating of these artifacts is uncertain and various scholars slide the artifacts between the Middle Bronze and Late Bronze Ages. In most cases, the site connections suggested by parallel artifacts from the Middle Bronze/Late Bronze Age transition are supported by a large body of Late Bronze Age parallels. In a few cases in the southern part of the valley (i.e. Jericho), the samples bridging the

Middle Bronze/Late Bronze Age transition are not supported by a body of Late Bronze Age parallels making suggested site connections more dubious but the artifacts more interesting.

4.1.3 Specific ceramic types for making site connections

Every area and period seems to have at least one main type/style of ceramic. In the Jordan Valley during the Late Bronze Age, there are several styles. The Mycenaean and Cypriot foreign imports as well as locally produced Chocolate-on-White ware each provide a consistent marker for dating and tracing points of connection.

The Late Bronze Age is marked by several distinct pottery types: Chocolate-on-White ware, Bichrome ware (Mazar 1990:216) and Mycenaean and Cypriot imports. The Bichrome ware is much more widely distributed across the southern Levant focusing on the coast and the northern part of the Jordan Valley. Both types of ware make their appearance in the Middle Bronze/Late Bronze Age transition periods but are considered primary markers for the Late Bronze Age I period. Bichrome ware is defined both by its distinct red and black decorations and its manufacturing technique. It first appeared around 1600 in Late Middle Bronze IIC strata and continued to the time of Thutmose III's conquest. The various styles reflect local and Cypriot motifs. Painted pottery first appeared at the very end of the Middle Bronze IIC (Bichrome ware) and continued to be the preferred treatment on vessels throughout the period (Mazar 1990:259). In fact, the amount of applied paint seems to increase as one moves from the beginning of Late Bronze Age I to the end of Late Bronze Age II. The use of applied paint to decorate vessels decreases by the latter half of Iron Age I. Neutron analysis has shown that the majority of the Bichrome ware was produced in Cyprus (Mazar 1990:-260). Due to Bichrome ware's broad distribution through the southern Levant it will not be used for making individual connection points. Only Mycenaean and Cypriot White Slip ware (section 4.1.3.2 & 3) will be singled out for individual markers of foreign imports. Chocolate-on-White ware will also be treated as an individual category due to its local production in the Jordan Valley (see following section).

4.1.3.1 Chocolate-on-White ware

Chocolate-on-White ware is a general term used to describe 'pottery that is usually decorated and of an excellent quality' (Fischer 1999:1). The surface is creamy white and glossy with a chocolate coloring. The color is made by a coating of a white slip containing clay with very little or no iron oxides which turns white when fired. Fischer adds that the 'chocolate' paints consist of a clay slip with ferric oxide which reacts with the Carbon Monoxide during the firing process to become dark brown. Chocolate-on-White ware is usually easy to identify because the firing process makes the thick white slip and burnish resistant to erosion and fire.

Chocolate-on-White ware appears in the Jordan Valley 'between the end of the Middle and the first part of the Late Bronze Age' Neutron activation analysis from samples found in the Baq'ah Valley of Jordan showed a unique profile different from Cypriot, Mycenaean and locally produced ceramics (Fischer 1999:2). Amiran (1970:18-160), made a separate category for this ware. Although it is still considered to be related to the earliest White Slip ware from Cyprus (Middle Cypriot III and Late Cypriot I ware) which appears shortly after Chocolate-on-White ware, McNicoll suggests that the use of the same burnished and polished creamy-white slips, fine red and Bichrome painted decorations from the Jordan Valley went to Late Cypriot potters (McNicoll Smith & Hennessy 1982:49).

Samples of Chocolate-on-White ware have been found in a number of Jordan Valley and highland sites in the Late Middle Bronze Age strata but are primarily found in Late Bronze Age I contexts. These sites include: Beth-shan, Pella, Deir 'Alla, Kataret Samra, Abu Kharaz, Jericho, Tell Kittan and Tell Hammeh in the Jordan Valley and Amman, the Baq'ah Valley, Irbid, Ain Abda (13 kilometers northeast of Irbid), Jerash, Rihab and Tell Fukhar in the eastern highlands. On the western side of the valley, sites which have Chocolate-on-White ware include: Megiddo, Ta'anach, Jerusalem, Tell Dan, Lachish, Ajjul and Tell Far'ah (cf. Fischer 1999; 2006). This relatively small spread of a single pottery type signifies a small local network of trading sites.

Chocolate-on-White ware is found primarily in the Jordan Valley where it was most likely manufactured (Mazar 1990:216-217). Ceramic compositional analysis has

confirmed this by identifying only sites in the Jordan Valley and one in southern Lebanon with clay deposits matching the Chocolate-on-White repertoire. A few pieces from both Beth-shan and Abu Kharaz point to manufacturing material from southern Lebanon around Rashiah Fukhar. All the other analyzed pieces from the above-mentioned sites point to a manufacturing area around Tell Hayyat and Pella, with Tell Hayyat being the most likely (Knapp 1989:130-137; McNicoll et al 1982:49; Fischer 1999:8), except for a few pieces produced near Kataret Samra in the Zerqa Triangle (Fischer 1999:8).



Figures 4.1 and 4.2: Chocolate-on-White miniature jar from Pella 1500 BCE and Chocolate-on-White ware from Abu Kharaz

<http://www.pasthorizonspr.com/index.php/archives>

http://www.fischerarchaeology.se/?page_id=35/11/2010/exploring-pella-bronze-age-temple-complex#ixzz1fl1l8cNQ

Chocolate-on-White ware includes bowls, kraters and jugs covered with thick white slip and painted with dark brown decorations. The most common decorations are geometric designs but there are occasional animals such as antelopes and fish.

Another ware which belongs to this period and which is important regarding the discussion of the chronology, is the Cypriot-imported White Slip I and Base Ring I ware (Fischer 1997:18-19).

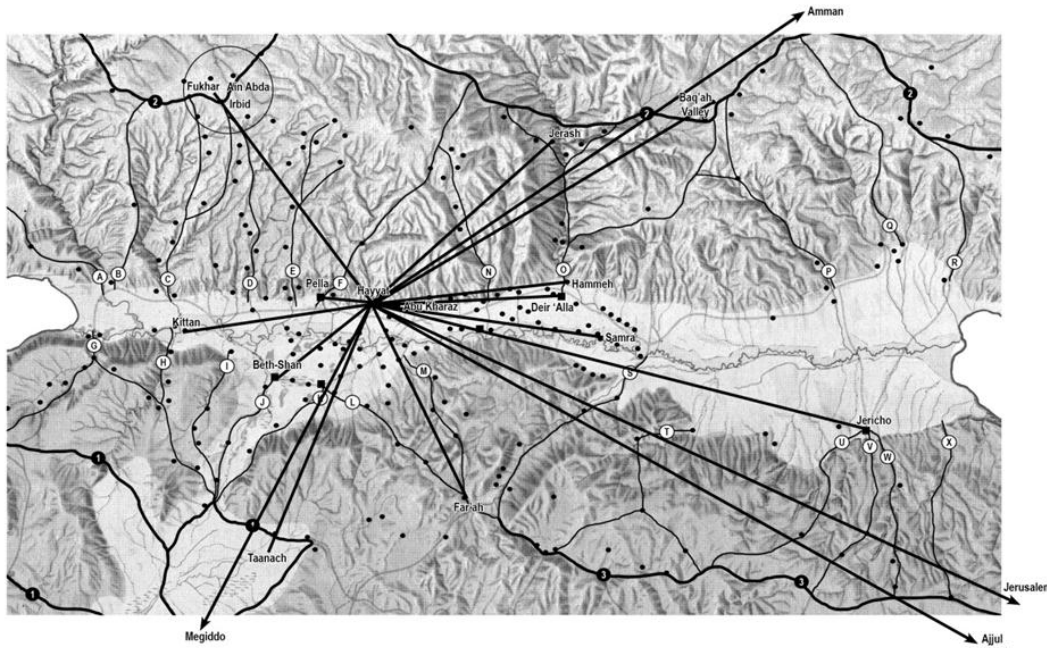


Figure 4.3: Chocolate-on-White ware connection points

Chocolate-on-White ware distribution network and points of connection originating from Tell Hayyat extending to both sides of the Jordan River, the eastern and western highlands and the coastal plain (Fischer 1999:20-23). The Chocolate-on-White distribution network reflects the trade routes mapped out in Chapter 2 (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

Local points of connection for Chocolate-on-White ware:

- Pella: Large numbers of Chocolate-on-White ware (especially from Tomb 62) (McNicoll, Edwards, Hanbury-Tenison, Hennessy, Potts, Smith, Walmsley, & Watson 1992:69-76; <http://www.jstor.org/pss/1357613> accessed December 4, 2011; Hennessy 1985:110-113);
- Abu Kharaz: Many examples of this excellent finished black and red decorated Chocolate-on-White ware including bowls, kraters, jugs and jars were found during the 1995 and 1996 dig at Abu Kharz in the kitchen area. In 1996, a group was found near a potter's wheel (Fischer 1997:18; Fischer 1991:96-97; 1993:292-294; 1994:130; 1995:97-98, 111-113);
- Deir 'Alla (Franken 1992:152);
- Kataret Samra (Leonard 1992:179-195);
- Tell Sa'idiyeh (Van der Kooij 2006:47);
- Tell Hayyat (Van der Kooij 2006:47);
- Rehob: Stratum D-11 (Mazar, Bruins, Panitz-Cohen & Van der Plicht 2005:202);

- Tell Kittin: From strata IV-III (Fischer 1999; 2006).

Regional points of connection for Chocolate-on-White ware:

- Tell Fukhar (Kafafi 2007:391);
- Amman Plateau (McGovern 2004:290ff);
- Baq'a Valley (McGovern 1986:68);
- Tell en-'Abada (Fischer spring 1995 expedition unpublished);
- Megiddo (cf. Fischer 1999; 2006);
- Ta'anach (cf. Fischer 1999; 2006);
- Jerusalem (cf. Fischer 1999; 2006);
- Tell Dan (cf. Fischer 1999; 2006);
- Lachish (cf. Fischer 1999; 2006);
- Ajjul (cf. Fischer 1999; 2006);
- Tell Far'ah (cf. Fischer 1999; 2006).

4.1.3.2 Mycenaean imports

Mycenaean imports began appearing in the Jordan Valley in the 15th century BC. This pottery comes from Aegean peninsula Greece and the Aegean Islands. These vessels were made on a fast potter's wheel from finely smoothed clay. Mycenaean imports are covered in a light cream slip with decorations usually applied in dark brown. The shapes and motifs are well defined and classified into three major groups termed 'Mycenaean I-III'. Each of these groups parallel specific time periods. Mycenaean II (Late Helladic IIA and some Late Minoan IB) is found in the Late Bronze Age I (1510-1440). Mycenaean IIA-IIIB (primarily Late Helladic IIIA and IIIB) is most prominent in the Late Bronze Age II (1390-1180). Although these styles had local imitations, clay analysis shows that the majority of imports originated on the Greek mainland (cf. Steiner & Van der Steen 2008:53).

Pottery made in the Aegean during the Mycenaean period (1600-1100 BC) has been found at over 100 sites in the Levant, demonstrating an extensive international trade network. Distribution from the coast reached through the Jordan Valley and up into the eastern highlands to Sahab and into Syria. The main concentration of Mycenaean ware is in the coastal cities and sites at the foothills of the major valleys. Parallels

across the southern Levant with Tell Abu Hawam's collection has led to the conclusion that this was the main port of entry for this import (Mazar 1990:262-263; Leonard 1987b:264). In the Jordan Valley, there are several sites where Mycenaean pottery has been found including Beth-shan, Tell Sa'idiyeh, Pella and Deir 'Alla. Beyond the Jordan Valley connected by trade routes requiring passage through the valley, Mycenaean pottery has been found at sites such as Irbid, Amman, Sahab, Madaba and Umm Dananir.

The use of Mycenaean ware varies from site to site. In locations like Deir 'Alla, it has only been found in religious and official contexts. In Beth-shan and at the Amman Airport sites, it is equally distributed in domestic and official structures (Steiner & Van der Steen 2008:66). The import of international trade goods does not appear to be limited to just high quality specialized use items but to broad daily use items as well.

The Mycenaean finds in the Jordan Valley do not necessarily represent direct contact with the Mycenaean world, but rather an integration with the international trade system (cf. Steiner & Van der Steen 2008:52-55). Therefore, the map on Figure 4.4 shows connection points starting at Abu Hawam and going to the next big Late Bronze Age site (assuming it was a trade and distribution center) and then branching off to smaller sites.

The Jordan Valley was a major transition point for Mycenaean ware travelling to the eastern highlands. 12% of all published samples in the Levant of Mycenaean ceramics are from Transjordanian sites (Leonard 1987b:262). These finds demonstrate not only that the Jordan Valley was integrated with the coastal and eastern highland trade routes but inland sites had the wealth to purchase imported goods from over 1000 kilometers away (Leonard 1987b:261). One can therefore expect that even more trade connections will be identified in the future (cf. Leonard 1987b:261-266).

Since Mycenaean pottery is classified in detail and easily recognizable, these pieces are very suitable for making trade connections between the Mycenaean world, the Jordan Valley and neighboring areas.

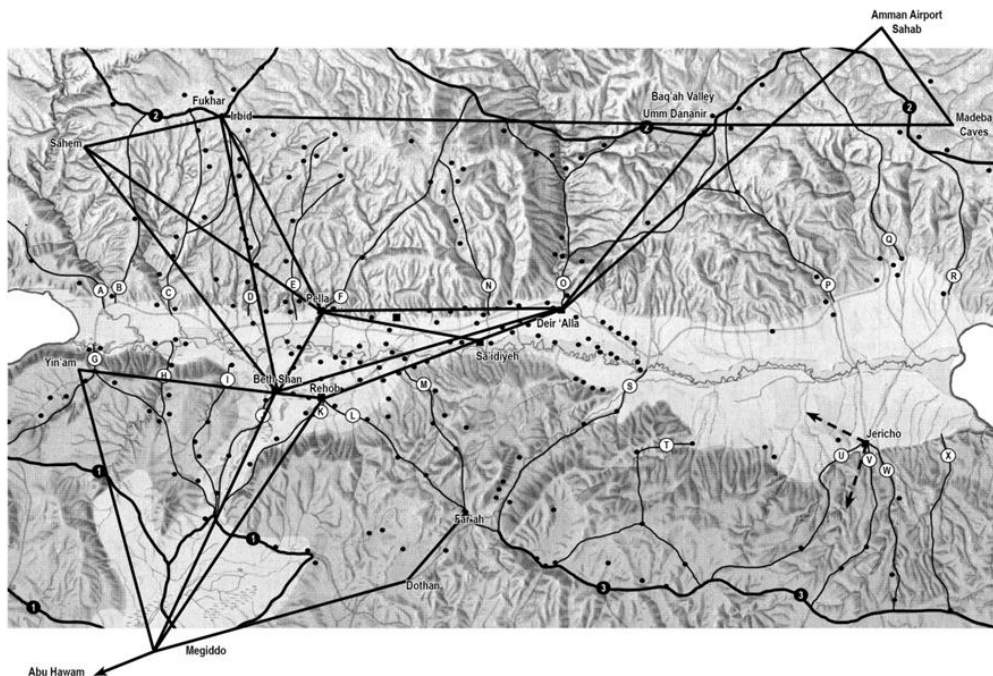


Figure 4.4: Mycenaean ware connection points

The network of Mycenaean ware entering the port at Abu Hawam and being distributed through primary and secondary trade hubs. Jericho has two incomplete lines for the Mycenaean ware found at this site could have arrived from either western highland routes (not covered in this thesis) or the Jordan Valley route (Van der Steen 2008:52-55). This distribution network reflects the trade routes mapped out in Chapter 2 (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

Local points of connection for Mycenaean ware:

- Beth-shan (Negbi 1991:214; Mazar 1993:228-229; Oren 1973:70-71);
- Tell Sa'idiyeh (Tubb 1998:106; Leonard 1987b:264);
- Deir 'Alla: Vessels found in the sanctuary and 'treasury.' The style of two of the vessels suggests that they were in circulation for at least fifty years before being located in their final resting place (Steiner & Van der Steen 2008:64; Homes-Fredericq & Franken 1984:140; Franken 1992; Leonard 1987b:264);
- Pella (McNicoll et al 1992:69-76; Leonard 1987b:264);
- Rehob: Fragments of bowls found in stratum D-7 (Mazar et al 2005:202);
- Jericho: From Tomb 13 (Garstang 1948:127).

Regional points of connection for Mycenaean ware:

- The Amman airport building (Mazar 1990:262-263);
- Tell Abu Hawam (Haifa): The largest collection of Mycenaean II ware has been found at this site. Parallels across the southern Levant with Tell Abu Hawam's collection has led to the conclusion that this was the main port of entry for this import (Mazar 1990:262-263; Leonard 1987b:264);
- Hazor: A major collection of Mycenaean pottery dating from Late Bronze Age I (Steiner & Van der Steen 2008:65);
- The Amman Airport: Several of the Amman Airport Building pieces are dated to the Late Hellenic IIA period 1500-1450 and a second group to Late Hellenic IIIB (1300-1200) (Stein & Van der Steen 2008:65). Nearly a third of all the ceramics were imported – primarily Mycenaean ware (cf. Homes-Fredericq & Hennessy 1989a:167-177; Van der Steen 1996:55-56; Van der Steen 2004:39, 117);
- Irbid/Tell Fukhar: Three of the Mycenaean IIB vessels were from the Mycenae region in mainland Greece, the others were of uncertain origin). Cypriot White Slip II ware was also well represented in the finds (cf. McGovern 1997:421-425; Strange 1997:399-405);
- Sahab: Tomb C artifacts consisted of a number of double pithos burials using collared rim jars and Mycenaean pottery (Ibrahim 1972:32; Van der Steen 1996:56);
- Madaba (Harding & Isserlin 1953; Van der Steen 2004:111);
- Umm Dananir and the Baq'a Valley: Ceramics in the Jebel Hawaya building consisted of Egyptian scarabs and cylinder seals, Mycenaean and Cypriot pottery, as well as antique Minoan and Egyptian vases (Homes-Fredericq & Hennessy 1989a:35); Cave 3B had Mycenaean IIIB/IIIA vessels, 2 stirrup jars from central mainland Greece (according to their chemical profiles) (Homes-Fredericq & Hennessy 1989a:33-35);
- Tell Far'ah (north): Burials contained Mycenaean ware (Van der Steen 2004:52; Gonen 1992);
- Megiddo (Mycenaean IIIA and IIIB imports) (Van der Steen 2004:28);

- The Mycenaean-style vessels at Tell Nami were found in tombs alongside collared-rim storage jars, a type of pottery which appears at the close of the Late Bronze Age II period and becomes a predominant type during the Iron Age I (Killebrew 1998:162-163);
- Dothan: Tomb I contained 3400 objects (Masters 2005:177) including imported Mycenaean pottery (Coogan, Exum, King & Stager 1995:80, 87-88);
- Sahem Tomb (http://www.fischerarchaeology.se/?page_id=13 accessed 10 October 2011);
- Tell Na'am: A large collection of collared-rim storage jars, Mycenaean IIB stirrup Jars and other pottery types which appear at the close of the Late Bronze Age II period were found in the tombs of Tell Na'am (Liebowitz 1982:64-66
<http://www2.ulg.ac.be/archgrec/IMG/aegeum/aegeum18%28pdf%29/20%20Killebrew.pdf>).

4.1.3.3 Cypriot imports

Ceramics from Cyprus begin showing up in the Levant during the Late Middle Bronze Age. In the Jordan Valley, they become consistent during the late 15th and 14th centuries. White Slip bowls and Base Ring ware forming juglets, jugs, flasks, bowls and libation vessels, are the most common types of imported Cypriot ware (Mazar 1990:261-262).

Cypriot White Slip bowls are usually called 'milk-bowls'. They are hemispherical and have a single wishbone handle which is characteristic of many Cypriot wares (Amiran 1969:172). Cypriot White Slip I and II wares are imported in all three phases of the Late Bronze Age. The difference between White Slip I and II is only in reference to the detail and amount of decoration. Base Ring I and II wares appear in Late Bronze Age I-IIA and Late Bronze Age IIA-IIB respectively. Again, the difference between the two is simply the size and proportions of the vessels and their decorations (Amiran 1969:173). Cypriot imports are all hand-made while their Canaanite imitations are wheel made (Amiran 1969:182).



Figure 4.5: Cypriot White Slip II ware from Abu Kharaz temple Phase VI (http://www.fischerarchaeology.se/?page_id=35 accessed 14 October 2011).

Local points of connection for Cypriot ware:

- Beth-shan: Cypriot imports are represented by many different styles and outnumber Egyptian imports (Oren 1973:87). Why there are more Cypriot imports than Egyptian examples is unknown;
- Sa'idiyeh: Tombs 60, 127 and 241 contain only Late Bronze Age II Cypriot Base Ring II (Oren 1973:116, 130-131; Pritchard 1964:9; 1980:4, 5, 6, 7, 14, 16, 18, 19, 21). Two examples are Tomb 101 (originally dated to the 12th century by Pritchard 1980:3-31; 38-40; 58-60) but redated by Oren to the 13th century and Tomb 117. Both contained similar bronze bowls and strainers of Cypriot ceramic imports (Pritchard 1964:9; Oren 1973:116);
- Abu Kharaz: Late Cypriot IIA through IIB was found in the small temple structure of Phase VII (Fischer 1999);
- Pella: Cypriot Base Ring and White Slip ware (Potts 1987:79; McNicoll et al 1992:69-76). Wooster Tombs 1, 14 and 15; Sydney Tombs 20, 21 and 27 contained a marked increase in Cypriot and Mycenaean imports (from Late Helladic IIIa2 and IIIb1) amongst the standard Egyptian goods. Tomb 62 excavated in the fourth and sixth season contained over 2000 ceramic vessels (most of them intact) which were dated to the Late Middle Bronze Age IIC and Early Bronze Age I period. There was a large amount of Chocolate-on-White ware, several pieces of Cypriot wares along with a large repertoire of bronze weapons, jewelry and stone vessels (McNicoll et al 1992:69-76);
- Rehob: 13th century Late Bronze Age IIA from stratum D (Mazar et al 2005:202);

- Deir 'Alla: In stratum Phase D (Franken 1992:1);
- Kataret Samra: Milk bowls, Base Ring I and II (cf. Van der Steen 2004 147-158);
- Jericho: Cypriot Bichrome ware was found in the two 8 x 8 meter squares of Kenyon's excavations (cf. Wood 2008).

Regional points of connection for Cypriot ware:

- Umm Dananir and the Baq'a Valley: Ceramics in the Jebel Hawaya building consisted of Egyptian scarabs and cylinder seals, Mycenaean and Cypriot pottery, as well as antique Minoan and Egyptian vases (Homes-Fredericq & Hennessy 1989a:35). Cave 3B had a Cypriot White Slip II 'milk bowl' (cf. Homes-Fredericq & Hennessy 1989a:33-35);
- The Amman Airport building: Cypriot Base ring I and II, White Slip I and II (Homes-Fredericq & Hennessy 1989a:169-171);
- Irbid/Tell Fukhar: Cypriot White Slip II ware was also well represented (cf. McGovern 1997:421-425; Strange 1997:399-405);
- Tell Far'ah (north): Burials contained Cypriot pottery (Van der Steen 2004:52);
- Sahab and the Baq'ah Valley, Um Dannanir burial caves: Cypriot ware was found (Van der Steen 2004:123-124);
- Tell Far'ah (north): Burials containing Cypriot pottery (Van der Steen 2004:52);
- Dothan: Tomb I contained 3400 objects (Masters 2005:177) including imported Cypriot pottery (Coogan et al 1995:80, 87-88).

Points of connection for Cypriot imports are not mapped out but follow a similar pattern as for Mycenaean imports (See Figure 4.4).

4.1.4 Non ceramic artifactual use for making inter-site connections

Objects made of metal or glass, scarabs and seals are also included with the ceramics listed in the various excavation reports are used in making parallels between sites.

There are a number of broader patterns that could also be used but are not included in this thesis.

4.1.4.1 Burial practices

A detailed study of burial practices, not just a survey of the material reported in tomb assemblages, would be a worthy pursuit. A number of studies go into great detail on burial practices (Gonen 1992; Gilmore 2002). In general, the local Canaanite pattern of multiple internments in caves or shaft tombs is so broad a regional phenomenon that it would not answer the questions regarding the Jordan Valley being a single economic unit or to what degree it was interacting with the highlands. Burial practices are inherently conservative and deeply rooted in a community's core culture and are assumed to change slowly over time (Gilmore 2002:95). Therefore, different burial styles are a good indication of different traditions and cultures at any given site. That is why only burial practices in a few excavation reports, when they are unique and point to a foreign population, are included in this research. The anthropomorphic coffins at Beth-shan and Sa'idiyeh's two dozen double-pithos burials and the stone and brick-lined tombs with roofs protruding above ground level with signs of mummification, point to Anatolian and Egyptian populations or influences (Tubb 1995:142-143) and are clear signs of international connections. In a few cases, such as the Mycenaean tomb at Dothan, the direct line of a foreign presence would not connect with an Anatolian presence at Tell Sa'idiyeh, yet when other parallels connect these two sites in Late Bronze Age trade, they are listed as a secondary connecting points under the assumption that two foreign minority groups in cities that are interacting with regular trade would have some awareness of, and interest in, a neighboring peer community.

4.1.4.2 Architecture

Architectural parallels are also mentioned in the literary review of the excavation reports but are not used in drawing points of connection. Only in cases of specific foreign architecture, such as the Egyptian structures at Beth-shan, Sa'idiyeh and Pella points of connection are made. Canaanite architecture of specific structures such as the Migdol temples which appear in key cities of the Jordan Valley reflect

architectural practices occurring throughout the Levant. These characteristics do show points of commonality and are mentioned in the text but not mapped out as they reflect cultural markers too broad for the scope of this thesis.

4.1.4.3 Bronze and copper objects

Bronze and copper object parallels are also noted in the individual excavation reviews. A number of bronze artifacts have been found in the Jordan Valley in Late Bronze Age strata. The finer pieces come from the cemeteries of Beth-shan and Tell Sa'idiyeh although Pella, Tell Mazar, Tell Deir 'Alla have also produced significant pieces (Negbi 1991:205).

Chemical analysis of various bronze and copper objects found at Beth-shan, the Baq'ah Valley, Sahab and the Amman Airport have been completed in the hopes of determining the origin of their material. Due to the large geographic spread of the Late Bronze Age bronze trade and the ancient recycling of bronze pieces as well as the small samples available, establishing a source for the metal in the samples has been inconclusive. The most that can be said is that Beth-shan and the Transjordanian sites share a closer relationship in their foundry and metal making practices than those of Akko on the coast (James & McGovern 1993:216-219). Analyzing the artistic style of the pieces is much more helpful in making geographic connections.

Bronze pieces from the Jordan Valley fall into four main categories denoting cultural sphere and not necessarily place of manufacturing:

- A) Egypto-Canaanite: All of these artifacts are components of wine drinking/serving sets and come from sites with an established Egyptian presence. Negbi suggests that the Tell Sa'idiyeh and Beth-shan sets are local imitations and those found along the coast are Egyptian imports and presents reasons for this conclusion (Negbi 1991:222). This style makes up 33% of the Jordan Valley repertoire (cf. Negbi 1991:222-227).
- B) Canaanite: This category is made up of bowls, lamps and 'offering stands' and is concentrated on local Canaanite sites that continued into the Iron

Age I. This style makes up 55% of the Jordan Valley repertoire (cf. Negbi 1991:222-227).

C) Levanto-Cypriot: A small repertoire of nine artifacts with origins in the Syro-Phoenician world and Cyprus. Samples in the Jordan Valley are limited to Sa'idiyeh and Beth-shan. The origin of different pieces in this category is divided between Cyprus and local production. This style makes up 7% of the Jordan Valley repertoire (cf. Negbi 1991:222-227).

D) Aegean: Denotes items from the Aegean world outside of Cyprus. Most items that fall into this category are weapons (and some cauldrons) from Beth-shan and Sa'idiyeh. This style makes up 5% of the Jordan Valley repertoire. The Madaba Tombs have several parallel pieces with those from Beth-shan and Sa'idiyeh (cf. Negbi 1991:222-227).

To read history directly into the archaeological evidence is dangerous. The presence of artifacts from one material culture found in another can easily be unrelated and independent from the historical record for a specific or regional location. The presence of an artifact at a site does not necessarily mean a historical influence from the artifact's originating culture. In this chapter, the presence of parallel artifacts is used to conclude a connectedness, via established trade routes. These points of connection relate directly to the questions of the Jordan Valley being a single economic unit and to what extent it was interacting with the neighboring highlands.

4.2 REVIEW OF EXCAVATION REPORTS

This section will review select excavation reports in the northern, central and southern sections of the Jordan Valley as well as those in the eastern and western highlands. Attention is only given to the Late Bronze Age and the transitional strata on either side. Although some key finds and architectural features are mentioned, focus is given to material that would demonstrate points of connection and interaction with other sites. This author applauds the excavators, governmental agencies and sponsors who work hard to ensure the publishing of timely preliminary and final reports. Their efforts are a great service to their discipline, peers and younger colleagues as well as to the benefit of humankind. In the absence of

excavations or notices of unpublished work, such as Tell Husn mentioned by Sauer (1986:6) and Leonard (1987a), much excavation work is for naught.

Surveys are a helpful starting point in any archaeological research. Archaeological surveys and databases were summarized in Chapter 2. Archaeological surveys are helpful in determining overall settlement patterns. They can cover a large area in a relatively short time span. They are non-destructive and can easily be repeated to verify and add to earlier research. However, surveys are limited in showing certainty of represented periods as well as the extent of occupation at any given site. Chronologically, later strata overlie older ones, remains of earlier layers are usually underrepresented and can be missed altogether, distorting the historical pattern. Tell Hammeh in the Ghor at the mouth of the Wadi Zerqa is an example where survey after survey (Glueck 1951; Gordon & Villiers 1983; East Jordan Valley Survey 1988) did not report any Late Bronze Age occupation. But excavation squares at the site in 1996 and 1997 by Van der Steen revealed two different Late Bronze Age strata with material suggesting a trade hub with 'involvement in interregional trade' (cf. Van der Steen 2004:147-158, 199). Surveys of Irbid on the eastern plateau have given little hint to the large Late Bronze Age city on the tell (Lenzen & Knauf 1985:151-159). Where earlier surveys reported no Late Bronze Age occupation, excavations have uncovered extensive Late Bronze Age settlements. In just the opposite situation, surveys have revealed Late Bronze Age sherds at sites like Tell el-Hammam, Iktanu and Nimrin on the southeast floor of the Ghor (Falconer 2007:19; Falconer & Redman 2009:5; 2009:5; Collins 2010:9, 15) but no Late Bronze Age occupation levels have been identified (Collins 2009:5; <http://www.cbri.org.uk/shuaib.html> accessed 11 November 2011). As the various excavation reports are reviewed, it is good to keep in mind that archaeology is limited by what it uncovers. Excavations have inherent limits of size, location and depth and the presence and preservation of material. Great strides have been made in the past decades on the amount of information that can be gathered from sites. Conclusions can be drawn from what is found and what has not been found, but the arguments created by absence must be treated humbly. The excitement of any

excavation is not in carrying buckets of dirt to the fill pile but in anticipating what the next movement of the trowel will bring.



Figure 4.6: Sites reviewed in this chapter

The archaeological sites reviewed for this chapter Site names keyed to the map number are on the following table (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

Table 4.1: Site key for map of Figure 4.6

No. on map	Name	No. on map	Name
1	Ueidiya, Tell	20	Hammam, Tell
2	Kittan, Tell	21	Iktanu, Tell
3	Gesher, Tell	22	Sahem Tomb
4	Kfar Rupin	23	Fukhar, Tell
5	Beth-shan/Husn, Tell	24	Irbid, Tell
6	Rehob/Sarem, Tell	25	Umm Dananir, Khirbet
7	Pella/Tabaqat Fahl	26	Baq'ah Valley sites
8	Wadi Rayyan site	27	Safut, Tell
9	Hayyat, Tell	28	Amman Airport Building; Citadel; Jebel Nuzha, Khirbet Hajjar
10	Abu Kharaz, Tell	29	Sahab
11	Sa'idiyeh, Tell	30	'Umeiri, Tell
12	Mazar, Tell	31	Madaba Caves
13	Deir 'Alla, Tell	32	Yin'am/Na'am, Tell
14	Hammeh, Tell	33	Mukharkhash/ Rekhes, Tell
15	Kateret Samra Tomb	34	Dothan and Bull Site
16	Damiyeh/Adam, Tell	35	Far'ah, (north), Tell
17	Jericho, Sultan, Tell	36	Ebal, Mount
18	Nimrin, Tell	37	Schechem/Balatah, Tell
19	Kafrein, Tell	38	Shiloh/Khirbet Seilun

4.2.1 Excavations in the Northern Jordan Valley

4.2.1.1 *Beth-shan/Tell Husn*

Beth-shan is one of the best known Jordan Valley sites after Jericho and certainly the best known of the Beth-shan Valley and the whole northern section of the valley. Although not the largest site (ranging between 1.2 and 4 hectares as compared to Tell Sarem/Rehob which is 18 hectares), its fame correlates with its strategic position along the key longitudinal and latitudinal trade routes of the coastal highway, the King's Highway and the Jordan Valley routes. This strategic location attracted the imperial power of Egypt who occupied the site for most, if not all, of the Late Bronze Age. The monumental architecture and artifacts with their inscriptions have made it one of the most studied sites of the Jordan Valley. The actual Late Bronze Age city was small (perhaps 2000 individuals) (McGovern & Fleming 1993:3). It is generally accepted that it served primarily as the headquarters for Egyptian rule in the Jordan Valley and area with its accompanying administrative buildings, temples and quarters for the Egyptian officials and garrison (Mazar 1997:67).

Major excavations of the ancient tell have included: The University of Pennsylvania between 1921 and 1933 led consecutively by Fischer, Rowe and Fitzgerald with partial publications by Rowe (1930), Fitzgerald, Oren (1973) and James and McGovern (1993). The northern cemetery was re-excavated in 1965-1968 by the University of Pennsylvania under the direction of Rowe. More recent excavations initiated by Geva and Yadin in 1983 (primarily focused on the Roman ruins) were expanded in 1989-1996 to include work on Tell Husn under Mazar.

The Late Bronze Age is the best known period of occupation at Tell Husn. The excavators have made a strong chronology based on scarabs, inscriptions and pottery types.

- Levels IXa-b represent the 15th-14th century: Egypt's eighteenth dynasty after Thutmose III and including the Amarna period;
- Levels VIII-VII represent the 13th century: Egypt's 19th dynasty;

- Levels VII and Lower VI represent the 12th century: Egypt's 20th dynasty.

Each of these three periods has two occupational phases. The close of each second phase is marked by a violent destruction layer and correlates with a period of Egyptian weakness in Canaan.

Level IX (Thutmose III, Amarna Age and Seti I) is one of the richest strata to be excavated. The initial Level IX temple plan was asymmetrical in contrast to the other Canaanite temples of this period (Mazar 1997:67). Within the buildings of these strata, examples of Canaanite monumental art were found including:

- Levels VIII-VI (Seti I, Ramesses II and Merneptah): The city plans of these levels are very similar with few changes. The temple was initially rebuilt in an Egyptian style along with administration buildings and dwelling quarters. Inscriptions and stelae from Seti I and Ramesses II were found on site but in the last strata of Upper Level VI. A large Migdol (fortress tower) was built (similar to the Migdol at the Egyptian fortress of Gebel Abu Hassa and the Sinai fortress of The Ways of Hours depicted in the reliefs of Seti I (James & McGovern 1993:56-57). The city plan conforms to that of towns and workmen's villages in New Kingdom Egypt (James & McGovern 1993:5) as well as being similar to other Egyptian outposts at Tell Far'ah (south), Tell Shari'a and Tell Aphek along the main coastal highway (James & McGovern 1993:27, 53-54). Evidence from inscriptions and pottery types point to Level VIII beginning in the 19th Dynasty with Ramesses I or Seti I (Late Bronze Age IIB). Major alterations mark the change between Level VII and VI and are attributed to the reign of Ramesses III;
- Stratum Level Lower VI: The architectural decorations are Egyptian and a number of Egyptian monuments and inscriptions are represented. The ceramics are primarily based on local Canaanite styles and locally produced Egyptian style ware. A small amount of Mycenaean IIIC pottery but no Cypriot imports were found in this stratum. Level Lower VI ends in a violent fire destruction layer;

- Level Upper VI is rebuilt almost immediately and both the northern and southern temples are put back into use. The artifacts of Upper VI are almost exclusively Canaanite with some elements being attributed to 'Sea Peoples' but not the Philistines due to the early date of the stratum and the later appearance of the Philistines. Only a few small sherds of Philistine pottery have been found at Beth-shan (cf. Mazar 1993:201-229).

The exception to a lack of Egyptian artifacts in Upper Level VI is a large statue of Ramesses III (The University of Pennsylvania labeled this stratum V but Mazar relabeled it Upper VI) (Mazar 1993:228) found alongside a stele of Seti I and Ramesses II. That the statue was still in a place of prominence signifies both an Egyptian presence at the site and a desire to proclaim Egyptian power in the region. Higginbotham makes a case that the statue of Ramesses III is a reworked statue of either Ramesses II or Seti I or even a local deity (as the feet are too wide apart for traditional pharaonic images of the time and there is a pattern of seated deities, legs apart with the king prostrating before the deity throughout the Levant (Higginbotham 1999:225-231). Either way, this statue, reworked into the image of the pharaoh, points not just to an Egyptian presence but of skilled Egyptian stoneworkers at Beth-shan during the reign of Ramesses III.

The last stratum of an Egyptian presence at Beth-shan appears to be Stratum Lower VI. Mazar's report of the 1990-1991 excavation season describes a 'violent destruction by fire of Stratum Lower VI probably caused by an attack on the city, related to the collapse of Egyptian domination' of the area. Stratum Lower VI contained marks of a well-planned city including a temple, public buildings and residencies with Egyptian style architectural decorations and inscriptions. Ceramic artifacts included locally made Egyptian style ware and some Mycenaean IIC pottery. Although most of the walls and structure were rebuilt after the destruction, the material remains of Stratum Upper VI is primarily Canaanite with 'elements that could be attributed to Sea Peoples' but only a few sherds of Philistine pottery (not enough to consider the stratum a Philistine site) (cf. Mazar 1993:228-229).

A large variety of local and foreign artifacts were uncovered at Beth-shan/Tell Husn and the northern cemetery representing local, regional and international trade. Items demonstrating international trade come from Egypt, the Aegean/Cyprus and northern Mesopotamia.

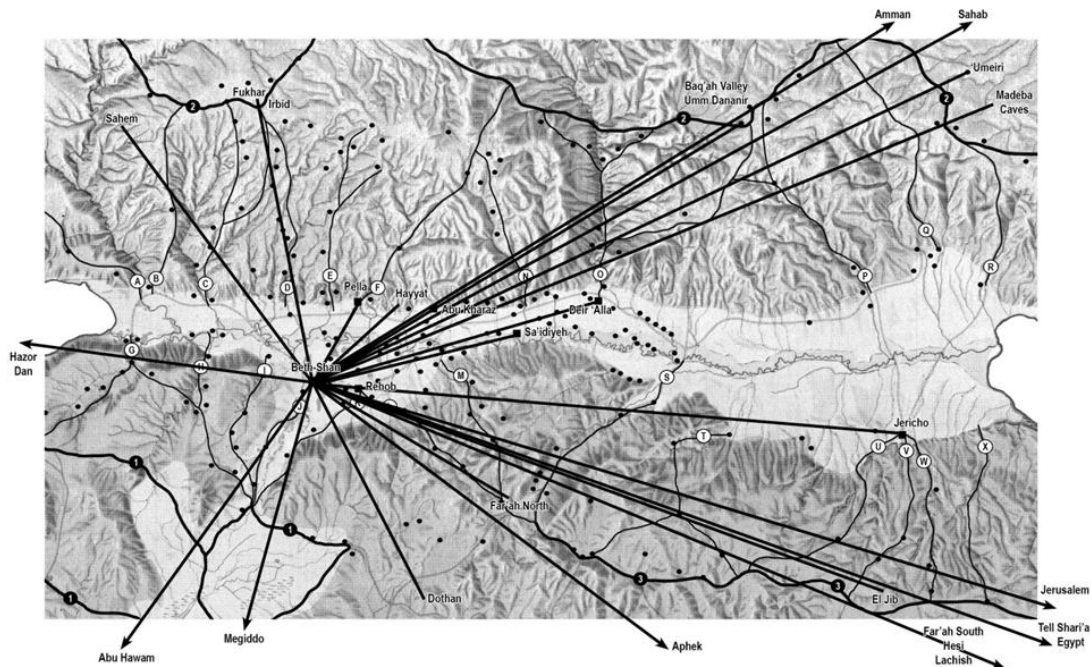


Figure 4.7: Beth-shan connection points
(Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011)

Evidence of international connections for Beth-shan:

- Egyptian trade: The number of Egyptian and locally made Egyptian style artifacts is immense and correlates with the architectural and literary evidence (sections 3.2.1.4; 3.2.1.9.3; 3.2.2.2.1; 3.2.2.4; Figures 3.6, 7, 10, 11) that a strong Egyptian presence was at Beth-shan throughout the Late Bronze Age. Egyptian style pottery of local material so closely resembles Egyptian ware that both Mazar and McGovern agree that Egyptian craftsmen were present in Beth-shan producing the pottery (Mazar 2006:142; James & McGovern 1993:244-245). Parallels of ceramics, glassware, ivories, scarabs, bronzes and architecture trace a clear line through other Egyptian occupied sites in the Jezreel Valley (Megiddo), the coastal plain (Lachish, Tell Ajjul, Far'ah) and throughout Egypt proper;

- Aegean/Cyprus trade (via the port at Abu Hawam): Mycenaean IIIA and IIIB pottery (Egyptian 18th dynasty). The Beth-shan Mycenaean III pottery comes from central mainland Greece and most likely from the area of Argolid (as established by style and neutron activation analyses). Most of the Beth-shan pieces probably came through Tell Abu Hawam (modern Haifa) as Abu Hawam's Mycenaean pottery share a similar style and neutron activation analysis. Most of the Mycenaean ware was found in the temple complexes or cemetery showing a restricted ceremonial use of these imports (James & McGovern 1993:108);
- Cypriot pottery: The Cypriot ware is closely associated with collections from Hazor (Strata XIV-XIII/Lower City); Megiddo (Stratum VIIIB), Lachish (Temple Fosse III and tomb 501], Tell Far'ah South, Jerusalem Nahalat Ahim tomb and Tell Beit Mirsim. The Cypriot ware of Levels VIII and VII were well distributed across the site, showing they were in use in the general population (James & McGovern 1993:116). Many locally produced ceramics were modeled after Cypriot pottery pieces. A classic example of this is the one-handled, carinated bowl Type F (Oren 1973:70-71);
- Mesopotamian trade: Anatolian and Cilician trade is represented by the collection of two-handled biconical jugs in the Anatolian and Cilician style. The earlier finer examples of this style are rare and found only at Beth-shan in late Middle Bronze and early Late Bronze Age I contexts. Later 14th and perhaps 13th examples are much rougher and decorated with Canaanite motifs. Examples of this later ware are also found in Dominus Flevit Tomb, Jericho (Tombs 5 and 13 Garstang 1933 Plates IV:4; XXII:5-13 Late Bronze Age II), Jerusalem and Irbid (Oren 1973:79-81). Cilician-Hittite ware also represents trade with northern Syria. The carinated footed bowl Type G 'Cilician-Hittite' style of northern Syria is a typical sample. These bowls are heavily represented in the Late Bronze Age I tombs and Levels IX. Very similar types were also found in homogenous Late Bronze Age I groups at Tell Ajjul, Far'ah, Hazor, Meggido and in the Dominus Flevit Tomb on the Mount of Olives (393 examples) (Oren 1973:70-72). A small amount of tools (i.e. a

shaft-hole axe), dagger and cylinder seals from northern Syria also represent an ongoing trade with northern Mesopotamia.

Evidence of regional trade connections for Beth-shan:

- Hazor, Megiddo, Dominus Flevit Tomb and Amman: Type D Alabastron vases from Late Bronze Age I (Oren 1973:78). Two elegant jugs from Beth-shan cemetery Tomb 42 are so identical in shape, decoration and dimensions of one found in Megiddo Tomb 1100A that Oren suggests they came from the same workshop (1973:83);
- Megiddo: Levanto-Cypriot Bronze pieces (Negbi 1991:221). Ivory spoons in the form of swimming girls from Grave 105 parallel with both Tell Sa'ideyeh and several tombs from Megiddo (Liebowitz 1987:12-13);
- Tell Far'ah, Megiddo, Lachish, Dominus Flevit Tomb, Hazor, Jericho (Tomb 13 Garstang 1933 Plate IV:7 Late Bronze Age II), Ajjul: One and two handled kraters from Late Bronze Age I deposits (Oren 1973:78-79);
- Amman and Megiddo: One-shoulder-handled jugs Type BI. The Megiddo and Beth-shan examples are so similar that Oren considers the possibility that they came from the same workshop (1973:84-85);
- Sahab and the Baq'ah Valley, Umm Dannanir burial caves: Open bowls with a high flaring ring base and concentric Bichrome decorations as well as imitation Cypriot ware (Van der Steen 2004:123-124);
- Irbid tomb: Two-handled biconical jugs as well as locally produced bowls and plates. Most parallels from the Beth-shan cemetery come from Late Bronze Age I and a few Late Bronze Age II examples (Oren 1973:68-70);
- Megiddo and Hazor: Storage Jars Type A: Long neck, single folded rim found in Middle Bronze Age II and Late Bronze Age I and a few possible Late Bronze Age II specimens. Another typical example of flat based pottery of Type C, D and E (Hazor: Cistern 9024; Tomb 8144-45; Megiddo Tomb 3085) (Oren 1973:68-70). Both these types have parallels in Jericho as well but from a Middle Bronze Age II/Late Bronze Age I context (Kenyon 1960 I:271 Type A2a) (Oren 1973:68-70). Chalices with outward pointing rims fouled down (Grutz 2007:11, 34);

- El-Jib and Dominus Flevit Tomb: Type B: Bag-shaped vases (Oren 1973:91);
- Amman, Gezer and Lachish: Type E: Goblet or Tazza of Late Bronze Age II Beth-shan strata IX to VI (Oren 1973:94);
- El-Jib and Hazor (tomb 29): Local imitation Mycenaean ware from late 14th century or early 13th century (Oren 1973:99);
- Tell Abu Hawam: Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Amman temple, Lachish and Tell Hesi: Flask from Tomb 90 dated to Ramesses II and equal with Level VII. Also has parallels with those found at Tell Deir 'Alla (Oren 1973:111);
- Tell Dothan (tomb I), Megiddo and Tell Far'ah north: Deep hemispherical bronze bowls from Tomb 90 and Level VI, juglet, strainer and lamps. Also parallels with those from Sa'idiyeh (Grave 101) (Oren 1973:115);
- Samarian Hills: Egg-shaped Jar type B of Stratum VII of Late Bronze Age II (Oren 1973:108);
- Madaba: The furniture and ceramic assemblage of several anthropoid coffin tombs from the northern cemetery are similar to Madaba tomb dated to Late Bronze Age II-Iron Age I on the Transjordanian Plateau (Oren 1973:130-131);
- Dan: Chalices with outward pointing rims fouled down (Grutz 2007:11, 34).

The western and eastern highlands are well represented with parallel material found at Beth-shan. Most of the jewellery and glass artifacts from the Late Bronze Age are Egyptian and are very similar to those found across the southern Levant in this period. A few Syro-Palestinian types have been identified. These include pure Syro-Palestinian designs and hybrids that incorporate Egyptian and Mesopotamian/Levantine motifs (i.e. Egyptian cobra figures given breasts) (James & McGovern 1993:215, 241). The largest amounts of parallel artifacts are from Hazor, Megiddo, Ajjul and Tell Far'ah. Not surprisingly, these sites trace out the key Egyptian international trade routes.

Evidence of local trade connections for Beth-shan:

- Jericho: Storage Jars Type A: Long neck, single folded rim found in Middle Bronze Age II and Late Bronze Age I and a few possible Late Bronze Age II specimens. These parallel with those from Middle Bronze Age II contexts (Kenyon 1960:271). Types A1a and A2a (Oren 1973:68-69) and two-handled biconical jugs from Jericho Late Bronze Age II Tombs 5, 13 also are parallels (Garstang 1933: Pls. IV:4 and XXII:5-13). Flat based pottery of Type C has very close parallels to the Jericho Tombs (Kenyon 1960:27) (Oren 1973:68-70, 81);
- Tell Deir 'Alla: Flasks from Tomb 90 dated to Ramesses II and equal with Level VII (Oren 1973:111) as well as a number of open bowls, cooking pot and chalice styles in Late Bronze Age Phase E (Van der Steen 2004:123-124) and chalices with outward pointing rims fouled down (Grutz 2007:11,34) are also parallels;
- Sa'idiyeh (Grave 101): Deep hemispherical bronze bowls from Tomb 90 and Level VI, juglet, strainer and lamps (Oren 1973:115); Also parallels with Megiddo and Tell Far'ah; Chalices with outward pointing rims fouled down (Grutz 2007:11,34). Levanto-Cypriot Bronze pieces (Negbi 1991:221); Ivory spoons in the form of swimming girls from Grave 105 parallel with several tombs from Megiddo as well (Liebowitz 1987:12-13).
- Pella: Chalices with a pronounced T-shaped rim (Van der Steen 2004:124). Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Rehob: Chalices with outward pointing rims fouled down (Grutz 2007:11, 34).

Most of the parallels with Jericho and Dominus Flevit Tomb (on the Mount of Olives) and el-Jib (on the Central Benjamin Plateau) are from the early Late Bronze Age. The parallels decrease and drop off completely moving from Late Bronze Age I to Late Bronze Age II (cf. Oren 1973:99). Beth-shan and Jericho must have had more interaction between them in the Middle Bronze Age (the underlying building temple structure of Level X and IX which the Egyptians destroyed and rebuilt has a parallel in Middle Bronze Age II structures at Jericho and Tell Beit Mirsim [Kenyon 1966:15f]) but this contact was dramatically decreased early in the Late Bronze Age.

Other Middle Bronze Age II parallels that begin to disappear in Late Bronze Age I are Type C handleless tall jar that paralleled with el-Jib and Jericho (but continued in

Late Bronze Age I at Dominus Flevit Tomb). Type D Egg-shaped vases also drop out of Jericho/el-Jib in Middle Bronze Age II and Late Bronze Age I transition (Oren 1973:92).

The anthropoid coffins from the Northern Cemetery are a special group of artifacts (Oren 1973:147). The anthropomorphic coffins of the Late Bronze Age add unique evidence to the population of Beth-shan from this period. The sarcophagi are dated from Late Bronze Age II B to the Iron Age 13th-11th centuries. A total of eleven funeral deposits containing anthropoid sarcophagi were discovered. Ten of the finds were in reused Early Bronze IV tombs with four of these tombs being recut and adjusted for the coffin burials. The floor plans of the modified tombs are very similar to the tombs at Tell Far'ah and other Mycenaean settlements across the Mediterranean basin including Mycenae and Enlomi. Oren finds many similarities with burials at the two cemeteries at Tell Far'ah (the 'Philistine Tombs' and '900 Cemetery') but some of the Beth-shan burials clearly predate those at Tell Far'ah. The tomb style and artifacts found in association with the anthropoid sarcophagi have led to a consensus that they belong to a foreign community of Mycenaean mercenaries or refugees. The coffins fall into two general categories: 'grotesque' and 'natural' in reference to the portrayal of the human face on them. The tombs with contemporary pottery on Level VII tend to be in the 'grotesque' style. Grave material from the other burials is on Level VI and later (Oren 1973:147).

The sarcophagi burials at Beth-shan appear to cover a range between Late Bronze Age I and Iron Age I. Some of the Tombs (60, 127 and 241) contain only Late Bronze Age II Mycenaean IIIB and Cypriot BR II imports and no characteristically Iron Age material, while other tombs (7, 66, 69, 202 and 227) contain material that can only be dated with certainty to Iron Age I and no imported goods. The other four tombs contained a mixed Late Bronze Age II- Iron I assemblage showing continuous use from the end of the 13th century through the beginning of the 11th century (Oren 1973:131). The furniture found in the tombs matched that from Beth-shan Levels VII-VI. The ceramic assemblage of these tombs is paralleled to the earlier Tell Far'ah tombs but without any of the Philistine type pottery. The same ceramic assemblage also parallels a tomb at Madaba dated to Late Bronze Age II-Iron Age I on the

Transjordanian Plateau (cf. Oren 1973:130-131). The Mycenaean imports from the earlier tombs are almost identical to the Mycenaean vases found at Tell Deir 'Alla in the same stratum as the alabaster vase containing the cartouche of Queen Twosert. This stratum at Deir 'Alla is separated by a destruction layer and a gap in occupation before any Philistine pottery is found (Oren 1973:131).

Oren reviews much of the discussion debating the identity of the people buried in the 'naturalistic' and the 'grotesque' style sarcophagi. The association of the 'grotesque' style sarcophagi with so many Mycenaean and Aegean artifacts in addition to the modified tombs similar to Aegean examples, has suggested that some of the burials are connected to the Sea Peoples but they are too early to be considered as part of the Philistine invasion. Sharden Sea People are mentioned in the Amarna Letters (EA 81, 122 and 123) in the northern Levant and Ramesses II hired some as mercenaries. The type of headdress portrayed on some of the sarcophagi is identical to those of the three tribes of Sea People represented on Ramesses III's temple at Medinet Habu. The three groups of Sea People are listed as the Peleset, Tjekker and Denyen. As the Tjekkers are portrayed as bearded at Medinet Habu and none of the images on the Beth-shan coffins have beards, the field is narrowed down to the Peleset or Denyen Sea Peoples. Oren identifies the Beth-shan coffins as most likely belonging to the Denyen on the basis of similarities between patterns on the headdress between the coffins and Medinet Habu pictures and the lack of any Philistine pottery found at the site (the Peleset were associated with the coast in later periods when Philistine pottery was abundant) (Oren 1973:136-139). The coffin burials are also accompanied by quantities of Egyptian artifacts and the coffins are designed in an Egyptian tradition. It is not certain who was buried in these coffins but it seems safe to say that it was probably a mixture of Egyptians and Sea Peoples living in Beth-shan at the close of the 19th and 20th Dynasties. Oren suggests that the 'grotesque' coffins were for the Sea People and the 'naturalistic' style coffins were for the Egyptians (Oren 1973:140).

Most attention in the excavations was given to the four temples that were rebuilt and continued to be used throughout each period. Each temple was clearly built and decorated in the Egyptian form and style (cf. Mazar 2006:61-113). The mixture of

Egyptian and Syro-Palestinian artifacts found in the temple complexes (purposefully buried under the stairs, a Canaanite practice, or scattered amongst the ruins) points to the use of the temples by both the Egyptian and the Canaanite groups. The artifacts found in the temples point to the temples not just being used by the two groups but by a blending of the two religious practices. The Mekal stelae found in the Egyptian temple of Level IX carved in a clear Egyptian style has a dedicatory inscription to 'the god, the lord of Beth Shan'. In the northern temple of Level VI, a stele of an Egyptian-dressed individual worshipping Antit (a Canaanite warrior goddess) was found. Three surviving lines on the stele read, 'An offering which the king gives to Antit, that she may give all life, prosperity and health to the double of Hesi-Nehkt ...'. Other Canaanite deity figures and references were found throughout Levels IX through V. The glass and faience objects found in the temple representing both Egyptian and Canaanite religious symbols, were mixed together indiscriminately on the same jewellery pieces (McGovern & Fleming 1993:5). These examples show that the Egyptian and Canaanite religions were not just being practiced side-by-side but mixing together. The temples of other Canaanite cities occupied by Egypt (Tell Far'ah, Ajjul, Deir Balah and Tell Shari'a) have not been excavated so a comparison of this syncretism or side-by-side religious practice is not possible. The arrangement of the Egyptian stelae and statues in the temple complex suggest that the temple was set up in the typical 'official' Egyptian and Nubian style from Level VIII to VII (cf. James & McGovern 1993:238-244).

The archaeological record of Beth-shan Levels IX-VII matches the historical record of Egyptian presence in the Beth-shan valley (see Chapter 2; James & McGovern 1993:235). Level IX at the beginning of the Late Bronze Age starts as a small Canaanite site with a temple. After the campaign of Thutmose III, the city is transformed into an Egyptian outpost. Although Pharaoh Shishak revisited the area during the Iron Age, the long standing Egyptian occupation of Beth-shan ends with Level Lower VI. The last dated artifact of Level Lower VI is a door lintel showing Ramessesuserkhephesh, 'Commander of the Troops of the Lord of the Two Lands' (probably the local Egyptian military commandant) worshipping the cartouches of Horus and Ramesses III (James & McGovern 1993:235). Other artifacts of the closing

days of the Egyptian 20th dynasty at Beth-shan are a faience plaque of Merneptah and a two-handled Egyptian amphora used only in the time of Seti II to Twosret (Mazar 2006:151-152).

The international and regional parallels of the artifacts are not a surprise due to the strategic location of Beth-shan. The number of Cypriot and Mycenaean imports found at Beth-shan (and Megiddo) led Oren to state that 'Megiddo and Beth Shan, the two mighty cities dominating the plain of Esdralon and its communications eastwards, were centers of Cypriot transit trade' (Oren 1973:87). Beth-shan was not just an importer but also an exporter. An alabaster Egyptian-style jug, 'derived unmistakably from the Palestinian pottery repertoire' so common at Beth-shan, was found in a Late Mycenaean tomb at Knossos (Oren 1973:83). This small piece of evidence points to the fact that Egyptian and Mediterranean trade to and through the Jordan Valley operated in both directions.

Although the main focus of the Late Bronze Age Beth-shan has been on the Egyptian imperial presence, the artifactual evidence suggests that the bulk of the population of the Late Bronze Age site were Canaanites living alongside the Egyptians. Local Palestinian artifact types comprise more than three-quarters of the pottery collection of Levels VIII-VII. Even the Mycenaean and Cypriot imports outnumber Egyptian style types.

4.2.1.2 Tell Sarem/Rehob

Albright was the first to publish a survey of Tell Sarem. Albright's initial reports after two surveys in the early 1920s which defined the main periods of the site as being the 13th through 10th centuries BC, have been confirmed by current excavations. The current excavation at Tell Rehob is a continuation of the Beth-shan Valley Archaeological Project which has concluded nine seasons of excavation at Beth-shan before moving to Tell Rehob in 1997. The goal of the Beth-shan Valley Archaeological Project is to explore the settlement history and archaeology of the region during the Bronze and Iron Ages. The Tell Rehob excavations are under the direction of A. Mazar for the Hebrew University.

Tell Sarem/Rehob is one of the largest mounds in Israel, located towards the center of the Beth-shan Valley six kilometers west of the Jordan River, five kilometers south of Beth-shan and three kilometers east of the western escarpment of the Gilboa ridge. The total size of the tell is just over ten hectares (26 acres) and is divided into an upper and lower mound separated by a ravine. The upper mound is 20 meters and the lower mound is eight meters above the valley floor. The ravine is probably due to a geological fault (exasperated by natural erosion) running east-west from a major north-south fault line just to the east of the mound (Mazar 1999:4-6). It is not clear when the ravine impacted the tell. The lower eastern mound has produced mainly Iron Age I-IIA material and the upper main mound has produced Late Bronze, Iron Age I-II and Islamic period material.

The focus of the excavations since 1997 has been the investigation of the Iron Age IIA period (10th to 9th centuries). Major building remains in these strata have a wealth of artifacts including hundreds of restorable ceramic ware, seals, ivories, metal and stone objects, bones, flint, clay altars/shrines, figurines and organic material. These rich and numerous artifacts are making Tell Rehob a major site and a standard for Iron Age studies across Israel (cf. Mazar & Panitz-Cohen 2007:202-203). In the reports of Mazar & Panitz-Cohen (2007:202-203) of the six squares opened, only square D along the severely eroded western side of the tell has penetrated below the Iron Age I level. The stratigraphy of the various squares is not completely coordinated. In general reference to the whole tell, Stratum I-VII are used to identify levels down to Iron Age IB. Reference to general (tell wide) strata only include Strata Levels I-VII which includes only up to Iron Age IB which is equal to D-3-5 and C-3. When making specific reference to a level within a single square, the square number with an Arabic number is used (i.e. D-7). Square D is the only square that reached the Late Bronze Age level.

Table 4.2: The stratigraphy of Tell Rehob (<http://rehov.org/Rehov/Results.htm#Site> and <http://www.rehov.org/Rehov/publications/index1.htm#19a> accessed 10 December 2011)

Period/ Phase	Date	Finds	Characteristics
Early Bronze II-III		Strong fortifications around the upper mound. Possibly the major stronghold for the region	This period has only been reached in one square on the southwest part of

			the mound
Middle Bronze		Mazar reference a report from Zori finding a Middle Bronze pottery and an Old Babylonian seal in his survey (Mazar & Panitz-Cohen 2007:202-203)	This period has not been reached in any of the squares
Late Bronze Stratum 11-8 Square D		Late Bronze to Iron I is one of the densest continuous occupation records in all of Israel	Complicated by severe erosion on the side of the tell
D-11	16th-15th centuries	Pottery from the Middle Bronze Age II/Late Bronze Age I transition. Some Chocolate-on-White ware	This stratum is 1.2 meters below the present-day alluvial field of the valley floor
D-10	15th-14th centuries	Only one ceramic bowl found in this two meter stratum which appears to have been a pool of water at the base of the mound, suggesting tectonic activity that affected drainage of the area during this period	
D-9b	13th century Late Bronze IIA	A large building was uncovered with a clay figurine of a naked woman with a lioness head. Fragments of Cypriot White Slip ware were found	
D-9a	13th century Late Bronze IIA	Rebuilding of the large structure with a cobble floor on top of D-9b with no evidence of a destruction layer between them	
D-8	Late 13th century	A thick plaster floor covered the remains of stratum 9. A one meter thick debris level separates strata D-8 and 7	
D-7 and D-6	12th century Iron Age IA – first half of 12th century	Part of a building with quantities of local pottery typical of the 12th century and some bronze pieces. A noticeable lack of Egyptian pottery was referred to, especially when compared to Beth-shan's parallel strata. Pottery repertoire comparable to Beth-shan strata VI dated to the 12th century. Two 'foundation deposits' of pottery bowls with a lamp between them were found. Several sherds of imported Mycenaean IIC ceramics were recovered	
D-5, D-4 and D-3	Late 12th century Iron Age IB		C-3
D-2	Iron Age IIA	Unique architecture of mud bricks without stone foundations. Dense continuous occupation	C-2 (Strata VI) The largest area excavated and where the excavation is most focused on studying the Iron Age. A number of buildings, open spaces and cooking areas. No evidence of a fire destruction but fallen bricks and

			cracks in the walls point to a major earthquake at the close of this stratum
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The preliminary reports on the Late Bronze Age material are brief and vague. Outside of a few specific examples (listed below) the Late Bronze Age pottery collection is simply summed up as,

... in the step trench in Area D exhibit a continuous development of pottery from the twelfth until the late eleventh centuries B.C.E. In this sequence, three main assemblages can be defined: The thirteenth century B.C.E. (Phases D-9 and D-8), standard Late Bronze Age II pottery, the twelfth century B.C.E. (Phases D-7 and D-6). The pottery continues Late Bronze Age II traditions, but there are some specific forms which find parallels in those Beth-Shean strata dated to the time of the 20th Dynasty (Level VI, our Strata S-4 and S-3 in Area S).

The Iron Age I phase which post-dates the 20th Dynasty (Phases D-5 to D-3). The pottery still continues Late Bronze Age Canaanite traditions, but new forms appear and a specific painted decoration is found: horizontal and wavy lines painted in red on the buff clay with no slip or burnish. The few Philistine sherds must have been imported from Philistia (<http://www.rehov.org/Rehov/publications/index1.htm#19a> section IV accessed 11 December 2011).

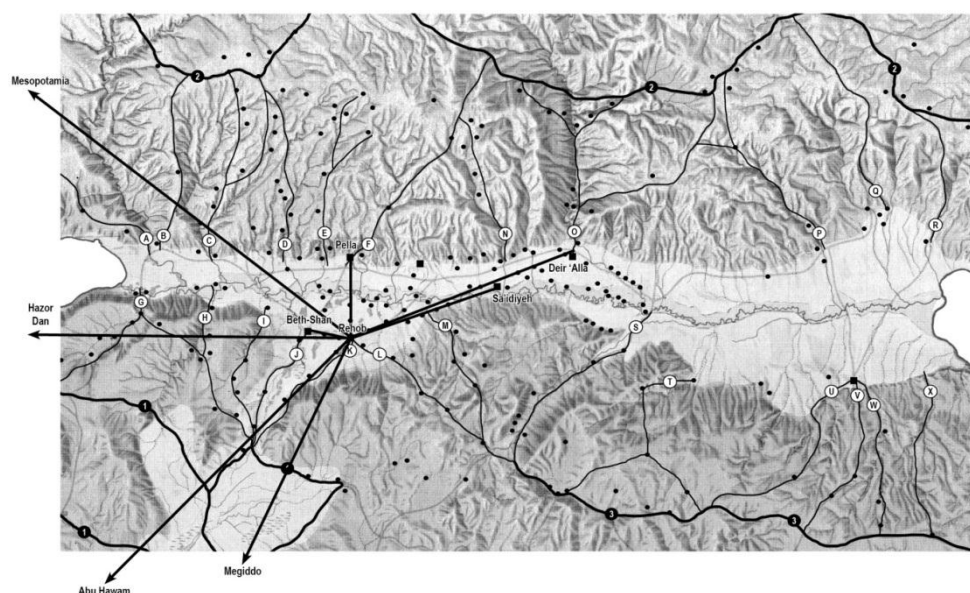


Figure 4.8: Rehav connection points

Rehav artifact parallels are local, regional and international (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

Local points of connection for Rehob:

- The Northern Jordan Valley: Chocolate-on-White ware from level D-11;
- Beth-shan: Pottery repertoire comparable to Beth-shan strata dated to the 12th century (Phases D-7 and D-6). The pottery continues Late Bronze Age II traditions, but there are some specific forms which find parallels in those Beth-shan strata dated to the time of the 20th Dynasty (Level VI). Two 'foundation deposits' of pottery bowls with a lamp between them were found in D-6 that parallels those found at Beth-shan (Mazar 2007);
- Pella: Chalices with outward pointing rims fouled down (Grutz 2007:11,34). Ceramic horned altars from Strata VI-IV in C-2 and E (Early Iron Age IA) with parallels at Pella in the Late Bronze Age Syrian style (Mazar 2007);
- Deir 'Alla: Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Tell Sa'idiyeh: Chalices with outward pointing rims fouled down (Grutz 2007:11,34).

Regional points of connection for Rehob:

- Tell Abu Hawam: Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Hazor and Dan: Chalices with outward pointing rims fouled down (Grutz 2007:11,34).

International points of connection for Rehob:

- The Aegean trade network (via the port at Abu Hawam): Several sherds of imported Mycenaean IIC ceramics were found in Stratum D-6 and Cypriot import ware from D-9b (Mazar et al 2005:202);
- Northern Levant (Greater Region stretching up towards Damascus): An ivory statue of a figure sitting on a throne found in Strata IV/C-2. The design and decoration of the dress of the figure is parallel to the Late Bronze Age ivory

plaque from Megiddo. Other similarities of the throne and cushions parallel with 10th century plaques from Megiddo and Samaria. The general subject and style is well known through the second millennium BC in the Levant with examples from Middle Bronze Ebla and Late Bronze Age I Alalakh and Hazor. Mazar states that as far as he is the judge,

... our example is the only free standing, three dimensional depiction of such an enthroned figure known from the Iron Age, and as such it may be taken as retaining second millennium traditions well into this period. Thus, our figure should be seen as being at the end of an iconographic tradition that is rooted in second millennium BCE Syria and the Levant (Mazar 2007:106).

Mazar observes a similar pattern in several four-horned pottery altars found in the Strata X (Iron Age IIA) that best parallels those from Tell Meskeneh (Emar) on the Euphrates and Pella (cf. Mazar 2007:101-110);

- Egypt: The danger of making an argument from absence has already been mentioned on a number of occasions. But one of Mazar's main summary points of the Late Bronze Age city risks an argument of absence as he compares the number of Egyptian artifacts found in his excavations to those at Beth-shan. Mazar states 'while Beth-shan appears to have been the Egyptian administrative and military center in the Beth-shan Valley, Rehob maintained a predominately Canaanite identity' (1999:2).

The excavations at Tell Rehob have revealed a major Bronze Age city. The main focus of the current excavations is on the Iron Age city. The Late Bronze Age city is still vague with little to no material referred to in the preliminary reports

(<http://www.rehov.org/Rehov/publications/index1.htm#19a> Accessed on 14th December 2011; Mazar et al 2005:202). The Early Bronze Age fortification system is one of the largest in Palestine. Both the upper and lower mounds have a Middle Bronze/Late Bronze Age transition with continuous and dense strata up through the 9th century. Certainly, additional Late Bronze Age strata and material is below the extensive Iron Age levels that are the current focus of the excavations. Presently we must rely on the historical record and the general/incomplete observations that Rehob was a large Late Bronze Age city with a primarily local Canaanite identity. The

geography, the historical record and the size of the tell allows us to assume it was a major player in the Jordan Valley region, drawing the attention of Egyptian imperial powers (Seti I came to relieve the city from conflict with its neighbors) and was integrated into the region accordingly

(cf. <http://www.rehov.org/Rehov/publications/index1.htm#19a> Accessed on 14th December 2011; Mazar et al 2005:202).

4.2.1.3 *Tabaqat Fahl/Pella*



Figure 4.9: From Pella looking west

The steep slope of Tell Husn is on the immediate left. The green fields mark the stream flowing from the spring in the center of the site. The Late Bronze Age temple area is just off the right foreground. The eastern Ghor can be seen right before the sterile eastern Qattara. The modern town of Beth-shan can be seen in the upper right (<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex>).

The site of Tabaqat Fahl/Pella is located opposite Beth-shan, in the foothills of the eastern escarpment. A strong perennial spring runs along the main tell. The site commands the cross roads of two ancient trade routes, the north-south route through the Jordan Valley and the west-east route from the coast through the Jezreel Valley and on to Bashan and Damascus. The site covers a large area made up of the 30 meter high Tell Tabaqat Fahl (the tell proper), the 65 meter Tell at Beth-shan (Tell Husn is mostly a natural hill) and several other smaller sites, caves and tombs separated by valleys and wadis in the immediate area which make up the larger site (cf. McNicoll et al 1982; Bourke, Sparks & Mairs 1994; Bourke 1977; Van der Steen 2004:42).

The earliest excavations at Pella were several tombs of the Late Bronze Age carried out by the Jordanian Department of Antiquities in 1958. Excavations at the site

began in 1967 by Wooster College under the direction of Smith (Bourke 1977). After the 1967 war, excavations resumed in 1977 in conjunction with the Jordanian Department of Antiquities, Wooster College and Sydney University under Hennessy. The partnership between Wooster College and Sydney University ran between 1979 and 1985 with Sydney University digging in the winter months (December-February) and Wooster in the spring (March-May). After the 1985 field seasons, Wooster completed their field program and, since that time, Sydney University has continued excavations alone (cf. McNicoll et al 1982; Bourke et al 1994; Bourke 1997; Van der Steen 2004:42).

Over the last 30 years, the Sydney University excavations have focused on each of the major occupation levels ranging from the Lower Palaeolithic through to the early Ottoman periods. Several Late Bronze Age levels have been uncovered. On the south-east side of the tell of Tabaqat Fahl, a large area of domestic architecture has been uncovered in three occupation levels covering the full Late Bronze Age (two dated to the Middle Bronze/Late Bronze Age transition and one covering Late Bronze Age IB-IIA. Besides the domestic architecture, two large buildings were also uncovered. One contained a large number of plastered bins with pottery, libation vessels and other artifacts which has caused it to be labeled a public temple (Bourke, Sowada & McLaren 1998:194). The second, contemporary building was uncovered across the street from the 'temple'. The architecture of this second building is very similar to Egyptian residences/governor palaces at Beth-shan and Sa'idiyeh but is dated about 200 years earlier than these other sites (Bourke 1997:108; Van der Steen 2004:42).

First discovered in 1994, the temple has turned out to be the largest stone Migdol temple in the Levant. The Late Bronze Age floor plans are parallel with the Migdol temples at Megiddo, Shechem and Tell Hayyat. The Sydney University excavations have been focusing on this Late Bronze Age Fortress/Temple Complex and neighboring structures since 1997 (cf. Egan & Bikai 1999:495-496). Temple construction began around 1900 BC and went through several major reconstruction phases before being abandoned in the 9th century (cf. Van der Steen 2004:42). The

temples at Deir 'Alla and Tell Sa'idiyeh were both destroyed (Deir 'Alla by an earthquake) around the same time.

The temple area has six major phases ranging from the Middle Bronze to the Iron Age (ca. 1900-800 BC) and appears to have been undisturbed since its final destruction around 800 BC. The first two phases in the Middle Bronze Age were both made of mud brick and appear to have been 'ritually decommissioned and filled in with its own material before the third phase was constructed'(<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011).

Around 1650 BC, the third temple was built which lasted into the Late Bronze Age before being rebuilt around 1500 BC. This temple was completely rebuilt as a large stone fortress/Migdol temple. This phase of the temple measured 22 x 16 meters. Large stone walls between two and three meters wide have been preserved to heights of four meters. The side of the hill was terraced for the new construction with buttressing walls of up to four meters thick. Sometime around 1500, the temple was modified a fourth time with the addition of two large stone towers at the eastern end. A cross-wall was also added inside near the western end to create a separate 'holy of holies'

(<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011).

Near 1350 BC, an earthquake severely damaged the temple, crushing and warping the foundations and probably collapsing the towers at the eastern end. The entire temple was rebuilt (fifth phase) on a narrower 18 x 12 meter base. The 'holy of holies' was redesigned with a much grander entrance of basalt flooring and columns. The inner room received a yellow plastered floor with faience plaques and semi-precious stone beads of agate, lapis and amethyst. The eastern towers were not rebuilt but the large eastern end of the temple was turned into a large colonnaded hall leading to the entrance of the 'holy of holies'. The foundation deposits of this phase have close parallels with Egyptian temples and underline the changing cultural orientation of the priestly elites at Pella.

At the close of the Late Bronze Age, the fifth temple was destroyed along with the rest of the site and buried in over a meter of debris (Bourke suspects an earthquake was responsible for the destruction but does not rule out military action) (<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011).

The last temple (Phase six) is rebuilt at the beginning of the Iron Age with a completely new floor plan. The new temple is smaller and the 'holy of holies' is blocked off with only indirect access.

The temple phases have produced a myriad of artifacts ranging from cult furniture, including Egyptian stone statue fragments, painted ceramic cultic vessels, bronze figurines and furniture fittings, glass plaques, gold jewelry and lapis and other polished stone beads, carved wood and ivory box or furniture inlays, along with a number of rich foundation, votive and destruction deposits (Bourke 1997:108; Van der Steen 2004:42).

The Migdol temple (Phase 3) transitions into the Late Bronze Age. Its general form and features belong to the Syrian Early Bronze/Middle Bronze Age temple form. No cult offerings were found in the temple for this phase. However, five meters to the south, a small finely built mud-brick building contained two rows of three square plaster-lined bins. The bins were sealed and contained miniature offerings, vessels, detailed alabaster cups and gypsum bowls with rams-head handles as well as other ceramics. Each bin was connected to the other via small ceramic funnels. Similar but larger funnels coming out of graves towards the surface have been found at Megiddo. This phase parallels temples found at Megiddo, Shechem and Tell Hayyat (Bourke in Egan & Bikai 1999:495).

A street separated this building from a third building, labeled by the excavators, a 'governor's residence' (Bourke 1997:108 relying heavily on Oren 1992:105-120). The occupational history of this building matched that of its opposite neighbor. It went out of use at the end of the 14th century (Bourke 1997:108). Early excavations of Sydney University (fourth and fifth) placed the beginning of the 'governor's

residence' at 200 years earlier than the Beth-shan examples. A number of fine artifacts such as the ivory inlay panels of the 'lion box' were therefore dated as possible Middle Bronze/Late Bronze Age transition pieces. By the ninth season, these artifacts and the 'governor's residence' had been dated to the 14th century making the Egyptian style structure and the ivory artifacts contemporary with the Beth-shan structures and the Megiddo ivories (Bourke 1997:107-108). Although the architecture is indeed suggestive of an 'Egyptian residence', it is dated at least 200 years earlier than the other residential buildings described by Oren at Sa'idiyeh and Beth-shan.

The phase four remodeling of the temple with the addition and separation of the 'holy of holies' marks a cultural/religious shift from the broad open air hall of previous temples. Bourke speculates that this may

... herald a formal change in religious observance, switching from the remote numinous figure of El/Dagan, Father of the gods, to his son, the martial storm god Baal/Hadad. Ugaritic religious epics document the triumph of Baal in a war between the gods, generally interpreted as recording the spread of Baal worship throughout MB/LB period Canaan. Although few Late Bronze Age temples contain unambiguous evidence on ownership, when rare inscriptions or more copious textual evidence does exist, it speaks mostly of Baal or Hadad. Archaeologically, male iconography predominates.

Accounting for such a profound change in religious practice is fraught with difficulty. One possible explanation would link the spread of Baal worship with the documented spread of the Hurrian peoples and their distinctive religious beliefs. Hurrian names become a noticeable presence in the roster of north Syrian peoples from the later years of the Early Bronze Age (ca. 2300 BC). They spread throughout Syria in the later Middle Bronze Age and began to infiltrate southern Canaan early in the Late Bronze Age. It is worth remembering that the Egyptians claimed it was precisely such a movement of Hurrian Mitanni that triggered Thutmose III's first military campaigns, which ultimately brought much of south/central Canaan (including western Jordan) under Egyptian control for the first time (<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011).

The remodeling phase around 1500 brings the Pella temple into a parallel form of those found at Shechem, Megiddo and Hazor before it was destroyed by an earthquake during the Amarna period around 1350.

Although the textual evidence of Amarna letters 255 and 256 as well as the following stelae of Seti I rescuing Beth-shan and Rehob from Pella infer that Pella was resisting, if not opposing Egyptian power, the architecture of phase five of the rebuilt temple of the Amarna period shows Egyptian influence. The foundation deposits have close parallels to Egyptian temples and the narrowing of the building made room for a courtyard/possible sacred garden (<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011).

Each phase of the Late Bronze Age temple has produced large amounts of fine Egyptian artifacts. Examples from each phase are:

Phase 3: Fine basalt statue fragments from the Middle Kingdom.

Phase 4: Egyptian blue flask and glazed stepped base (found together).

Phase 5: Fragment of Egyptian scribal statue of polished Aswan granite.

The phase four temple, lasting almost 150 years (1500-1350) provided the richest level of artifacts. The floor of the open hallway became honey-combed with offering pits (Bourke et al 1998:194). Some artifacts, such as the one-fourth size scribal figure in Aswan granite appear to come from imperial workshops in Egypt. Other artifacts from these offering pits include: copper alloy figurines of the so-called 'smiting god' form, copper furniture fittings, miniature harpoons, faience 'Kassite buckets', glass and green jasper scarabs, copper cymbals and several sets of scale pans and weights. A diverse collection of specialized ceramic offering vessels are also represented in the repertoire. They include kidney-shaped bowls, jars and jugs painted with the 'tree of life' motif, a number of ring kernoi (hollow tyre-shaped vessels with multiple openings) and several decorated cylindrical fenestrated cult stands (cf. <http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex#ixzz1f1l8cNQ> accessed 10 September 2011).

The hinterland surrounding Pella appears to be devoid of Late Bronze Age settlements. Although the land was environmentally ideal for small settlements, only a few small forts have been found in the area. This suggests that the countryside was

not a safe place to settle as opposed to the Zerqa Triangle around Deir 'Alla which had a relatively dense settlement population (Van der Steen 2004:97).

A number of Late Bronze Age tombs have been excavated around the larger site, many with rich burial deposits. In 1964, a tomb with several anthropoid sarcophagi in the 'naturalistic' style was found. They were dated to the Late Bronze Age IIA-B periods. They have disappeared without further recording/reporting (cf. Yassine 1975:60; Bourke & Sparks 1995:159). These coffins suggest that there was an Egyptian population living at the site during the Late Bronze Age. Other early excavation material was lost when the Jerash Museum's storage rooms were looted during the time of civil strife in 1968 (McNicoll et al 1982:36). Although a number of rich tombs have been excavated on the slopes of Tell Husn (Beth-shan), the Sydney/Wooster excavations estimate that the sides of Tell Husn have eroded close to five meters since the Late Bronze Age. The wash at the bottom of the hill is littered with Middle and Late Bronze Age grave material (McNicoll, Smith & Hennessy 1982:36). In the 1992 season, excavations at the original Jordan Department of Antiquities Tomb 1 (from 1963-64) was resumed. Near the entrance at the Late Bronze Age II level, a large male skeleton wearing heavy bronze manacles was found lying crouched over. It appears that his fourth and fifth vertebrae had been severed by a sharp blow at an oblique angle (Bourke 1997:109-110). The tomb produced a large number of ceramic, stone, glass and metal artifacts attesting to the wealth of the period. The artifacts, the monumental size of the tomb and the possible human sacrifice have caused some to suggest that this was the tomb of one of Pella's rulers from the Amarna or closely related periods (cf. Bourke & Sparks 1995:149-167).

Of the ten tombs containing Middle Bronze and Late Bronze material, six were exclusively limited to Late Bronze Age usage. Material from the tombs contained a mixture of regional fine and coarse pottery. The exclusive Late Bronze Age tombs (Wooster Tombs 1, 14 and 15; Sydney Tombs 20, 21 and 27) contained a marked increase in Cypriot and Mycenaean imports (from Late Helladic IIIa2 and IIIb1) amongst the standard Egyptian goods. Tomb 62, excavated in the fourth and sixth season, contained over 2000 ceramic vessels (most of them intact) and was dated to

the Late Middle Bronze IIC and Early Bronze I periods. There was a large amount of Chocolate-on-White ware, several pieces of Cypriot wares along with a large repertoire of bronze weapons, jewellery and stone vessels (McNicoll et al 1992:69-76).⁵¹

These finds led both teams to conclude that there was no archaeological break between the prosperity of the Middle Bronze Age and Late Bronze Age strata at Pella and that foreign trade actually increased during the first half of the Late Bronze Age. The large stone structure built atop the Middle Bronze fortification as well as other large buildings from the Middle Bronze IIC period continued to be used during the Late Bronze Age I with no change in activity or prosperity (Homes-Fredericq & Hennessy 1989b:421). The second half of the Late Bronze Age saw a slight economic decline until the end of the Late Bronze Age when there was a major fire destruction layer. On top of this destruction layer, a large amount of Iron Age I material with some 'Philistine' painted pottery samples suggest the destruction occurred early in the 12th century (cf. Homes-Fredericq & Hennessy 1989b:406-423; Van der Steen 2004:42-43).

⁵¹ Analysis and comparison of the skeletal remains of both the Pella and Tell Sa'idieyeh cemeteries have identified no remains that could be assigned an age of death that was over 50 years old (Hendrix 2004:166).

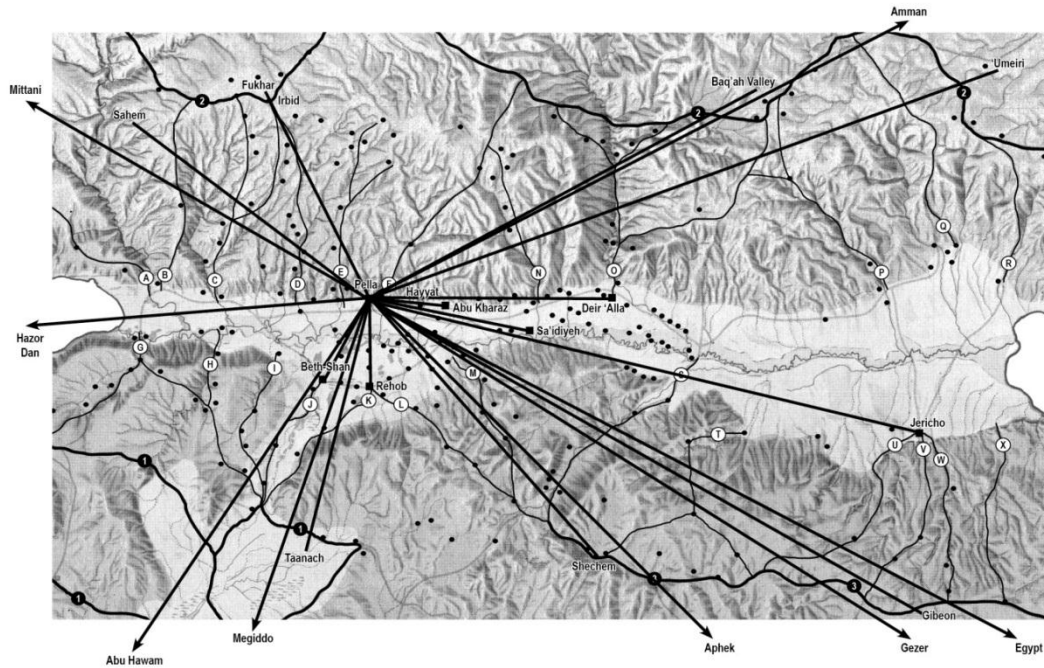


Figure 4.10: Pella connection points

Artifactual parallels found at Pella testify to the international trade networks that passed through the Northern Jordan Valley (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

International points of connection for Pella:

- Egypt: Many ceramics, alabaster bowls and statues, scarabs, panels of carved ivory, and faience⁵² (McNicoll et al 1992:59-63). Architecture of 'governor's resident' with Egyptian 'beer bottles' and clay papyrus-roll sealing (Tubb & Chapman 1990:28-29; Negbi 1991:214);
- Aegean (via the port at Abu Hawam): – Cypriot Base Ring and White Slip ware (Potts 1987:79; McNicoll et al 1992:69-76). Mycenaean ware from the 'governor's residence' securely dated to the Late Bronze Age I-IIA phases (Bourke, Sparks & Sowada 1998:199);
- Northern Levant: Mittanian seals from the 'governor's residence' securely dated to the Late Bronze Age I-IIA phases (Bourke et al 1998:199-200);
- Cuneiform literary world: Two cuneiform tablets (too eroded to read) found in one of the floor pits of Temple Phase 3 in a 15th century context.

⁵² Egyptian faience is non-clay based ceramic displaying surface vitrification which creates a bright luster of various blue-green colors. Having not been made from clay it is often not classed as pottery.

Cuneiform tablets in the southern Levant are very rare. The only other cuneiform tablets found in the region are at Taanach (15th century context) and Jericho (stratum V between the Middle Bronze Building and Iron Age layer [Potts 1987:59]).

Regional points of connection for Pella:

- Hazor: Ceramic bowls, lamps, cooking pots, kraters and red-slip ansulate jars (Smith 1973:211) The remodeling temple in Phase 3 around 1500 brings the Pella temple into a parallel form of those found at Hazor (<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011). Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Megiddo: Ceramic funerary tubes (Smith 1973:211-212). Carinated bowls and jars from Tomb 21 are identical to those from Megiddo Tomb 1100A-D, sherd of very fine face vase from early 15th century tomb 18 (McNicoll et al 1982:38-39, 48). The remodeling temple in Phase 3 around 1500 brings the Pella temple into a parallel form of those found at Megiddo (<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011). Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Tanaach: See cuneiform literary world above. Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Shechem: Tomb 62 (one of only two fully intact tombs found in fourth and sixth season), dated to Middle Bronze Age IIC and Late Bronze Age IA, is very similar to a tomb excavated at Tell Balata in 1976 (McNicoll et al 1992:69). The remodeling temple in Phase 3 around 1500 brings the Pella temple into a parallel form of those found at Shechem (<http://www.pasthorizonspr.com/index.php/archives/11/2010/exploring-pella-bronze-age-temple-complex> accessed 19 September 2011);
- Gezer: Gypsum bowl from the 'governor's residence' early Late Bronze Age (Bourke et al 1998:193-194);

- Aphek: The 'governor's residence' architecture and date parallels that of other Egyptian 'governor's residences' including Aphek, Gezer and Beth-shan (Bourke 1997:108; Oren 1992:117-20);
- Tell Dan and Gibeon: Gypsum bowls from the storage bins of Phase 3 of the temple (Early Late Bronze Age) (Bourke et al 1998:193-194). Chalice with outward pointing rim fouled down (Grutz 2007:11,34);
- Abu Hawam: Chalices with outward pointing rims fouled down (Grutz 2007:11, 36).
- The Baq'ah Valley: Iron jewellery and weapons from burial assemblages (McGovern 1995:31).

Local points of connection for Pella:

- Beth-shan: Carinated bowls and jars from Tomb 21 are identical to those from Beth-shan Tomb 42 (McNicoll et al 1982:48); Chalices with outward pointing rims fouled down (Grutz 2007:11, 36);
- Jericho: Sherd of very fine face vase from early 15th century tomb 18 parallel with Middle Bronze/early Late Bronze Age tomb piece found by Garstang (McNicoll et al 1982:38-39); three Egyptian scarabs found in 15th century context with the Egyptian Lion Box are of a rare motif (before the Ramesside period) of uncrowned bare-headed pharaoh. Another rare sample comes from Jericho tomb B35 (Potts 1987:66-67). Both these examples could be Late Middle Bronze or Early Late Bronze Age (McNicoll et al 1992:64). Gypsum bowls from the storage bins of Phase 3 of the temple (Middle Bronze/Early Late Bronze Age) (Bourke et al 1998:193-194);
- Northern Jordan Valley: Chocolate-on-White ware from Late Bronze Age I strata V of Sydney University's east cuts (Potts 1987:59) and Tombs 20-22 (McNicoll et al 1982:42-43; 1992:53);
- Deir 'Alla: The ceramic repertoire of Late Bronze Age I Pella parallels that of Deir 'Alla Late Bronze Age Phases A-D. The Late Bronze Age II repertoire parallels Deir 'Alla Late Bronze Age Phase E. In the East Cemetery of Pella, a number of ceramic tubes used in the burial chamber match one found in Deir 'Alla Late Bronze Age Phase E, although the Pella context was slightly earlier

than Phase E in the beginning of Late Bronze Age II (Smith 1973; McNicoll et al 1982; Franken 1992; Van der Steen 2004:120). A large number of flaring triangular rim cooking pots have been found. This style is limited to Deir 'Alla (and a few other sites in the Jordan Valley in a Late Bronze Age II context [Van der Steen 2004:121]). Several other ceramic styles are equal to Deir 'Alla Late Bronze Age Phase E (Van der Steen 2004:121). Chalices with outward pointing rims fouled down (Grutz 2007:11, 36);

- Rehob: Chalices with outward pointing rims fouled down (Grutz 2007:11, 36);
- Tell Sa'idiyeh: Chalices with outward pointing rims fouled down (Grutz 2007:11, 36).

4.2.1.4 Abu Kharaz



Figure 4.11: The view west from Abu Kharaz

The modern main north-south Jordan Valley road in the foreground, then the fertile Ghor, the western Qattara with the western highlands in the background (Abu Kharaz and Tell Maqbarah http://www.fischerarchaeology.se/?page_id=11 accessed 8 September 2011).

Tell Abu Kharaz and Maqbarah are strategically located 4 kilometers east of the Jordan River, just north of the Wadi Yabis which would have provided a perennial water supply. From the top of the tell, one has a panoramic view north, south and across the Jordan Valley. One can see the hills of Nazareth, Mount Tabor, Beth-shan, the eastern Jezreel Valley, the Samarian hills and the area around Tell Sa'idiyeh. In ancient times, the site would have clear influence on the north-south movement

along the eastern Ghor just south of the Beth-shan/Pella fords. Beth-shan is only 15 kilometers to the northwest and the Mediterranean coast is a further 65 kilometers. Pella/Taaqat Fahil is only 6 kilometers to the north.

The Swedish Jordan Expedition from the University of Goteborg has an ongoing excavation at the 12 hectare (30 acre) site of Abu Kharaz that began in 1989 under the direction of Peter Fischer. They uncovered substantial urban remains from three major periods: Early Bronze IB-III, Middle Bronze IIB through Late Bronze II and Iron Age I-II (Fischer 1999; 2006).

Tell Maqbarah (300 hundred meters to the northwest) must have surely been connected to the Abu Kharaz as both were surveyed in 1989 and found to have similar Late Bronze Age sherds and mud brick structures. Unfortunately, Tell Maqbarah was bulldozed by local farmers a few months later before excavations at Abu Kharaz started. The top two meters of most of the tell were removed. A 1992 sounding by Palumbo revealed similar settlement layers of Middle Bronze IIB through Late Bronze and Iron Age artifacts as at Abu Kharaz (Fischer 1999; 2006).

Six occupation phases have been revealed from the Middle Bronze/Late Bronze Age transition to Iron Age I, four ending with destruction layers (IV/1, IV/2, V and VII). Phases IV/1 to VIII are surrounded by a double casement defensive wall ranging between one and two meters in width. The wall is built on the foundations of the early Bronze Age fortifications (Fischer 2006:330-331). No Middle Bronze Age occupation has been identified until the Middle Bronze/Late Bronze Age transition of this Phase:

- Phase IV/1: Middle Bronze/Late Bronze Age transition. This level shows resettlement of the site after an occupation break starting at the end of the Early Bronze Age. Large fortification walls were built on the foundations of the Early Bronze Age walls. The Late Bronze Age occupation level is smaller than the Early Bronze Age population.

A great deal of pottery came from this level. Much of the pottery was locally made from clay near the site (a stone potter's wheel and cache of unfired pots were found in one excavated room). This pottery has some similarities to pottery from Pella (6 kilometers north) but enough distinction to clearly state that there were separate pottery production centers with their own styles (Fischer 2006:330-331). Several Bichrome-decorated jugs whose petrography reveals they were produced on the Lebanese coast between Beirut and Juniah, were also found.

A store-room filled with jars and cleaned crops of barley and wheat shortly before its destruction are evidence that these were the main crops under production. Over 85 kilograms of various animal bones were also collected. The large amounts of sheep, goat and cattle bones point to a rich herding tradition.

A room containing a bench and numerous unfinished flint tools is evidence of an industrial structure. A second room with part of a furnace and a tuyere⁵³ found in an area of ash may point to production of copper alloys or remelting of bronze scraps and casting (as no source of copper or iron are in the immediate vicinity [Fischer 2006:342]);

- Phases IV/1 and IV/2 are dated to 1600 but 1530 BC is suggested (Fischer 1999:20).

Phase IV/2: The city walls were enlarged and a large tower was built in one section of the wall. More domestic buildings, a large room with ovens and an adjacent storeroom where a grain silo and water cistern were found, were built. Flour was found leading to the suggestion of a town bakery (Fischer 2006:342-342). The Phase ended in fire with an immediate rebuilding;

- Phase V: Radio carbon dated between 1520 and 1410 BC, Late Bronze Age IA (Fischer 1999:19; 2006:323). The majority of the structures come from this

⁵³ A nozzle or pipe fixture through which air is delivered to the interior of a furnace or to the fire of a forge.

phase (Fischer 2006:332) which is the most extensive occupation level of the Late Middle and Late Bronze Ages. The bakery was still in use when it was burned down. Evidence of pottery production, a potter's wheel of basalt together with some unfired broken vessels, was found in the south-east of the bakery site. Many tools such as millstones, pestles and flint tools were found in these large rooms, all dealing with grain and the preparation of flour. Another room, 30 meters from the bakery, had a grain silo and tools related to crop processing and storage. The Phase ended in violent fire. Large numbers of Chocolate-on-White ware and Cypriot imports of a Base Ring I bowl were found, one piece very typical of the Troodos mountain area (Fischer 1999:19);

- Phase VI: General domestic structures rebuilt on top of Phase V destruction level. The architectural remains of this layer are scarce due to Phase VII and later incursions. Some Chocolate-in-White ware was found in this Phase with a Central Jordan Valley provenance;
- Phase VII: A well preserved temple including a square free-standing stone built altar. Over 30 complete or almost complete vessels, including Cypriot imports (late Cypriot IIA through IIB) were found. This phase was destroyed by fire. Bakery and grain storage areas continued;
- Phase VIII: Domestic structures heavily damaged by Iron Age structures built after this phase (cf. Fischer 1999; 2006).

Although the sites of Beth-shan, Sa'idiyeh and the foothills around Pella, with their established Egyptian presence, are visible from Abu Kharaz, no clear Egyptian material has been found at Tell Abu al-Kharaz during the Late Bronze Age periods. The town seems to have become smaller than it was in the Early Bronze Age, the city wall changing from a solid, massive structure into a double casement wall. The remains of the massive Early Bronze Age city wall were used as a foundation for the Middle Bronze/Late Bronze Age wall. The reoccupation of Abu Kharaz at the end of the Middle Bronze/Late Bronze Age transition, while Pella maintained a continuous rich Middle Bronze Age occupation, suggest that Abu Kharaz was independent from Pella (Fischer 1999:329).

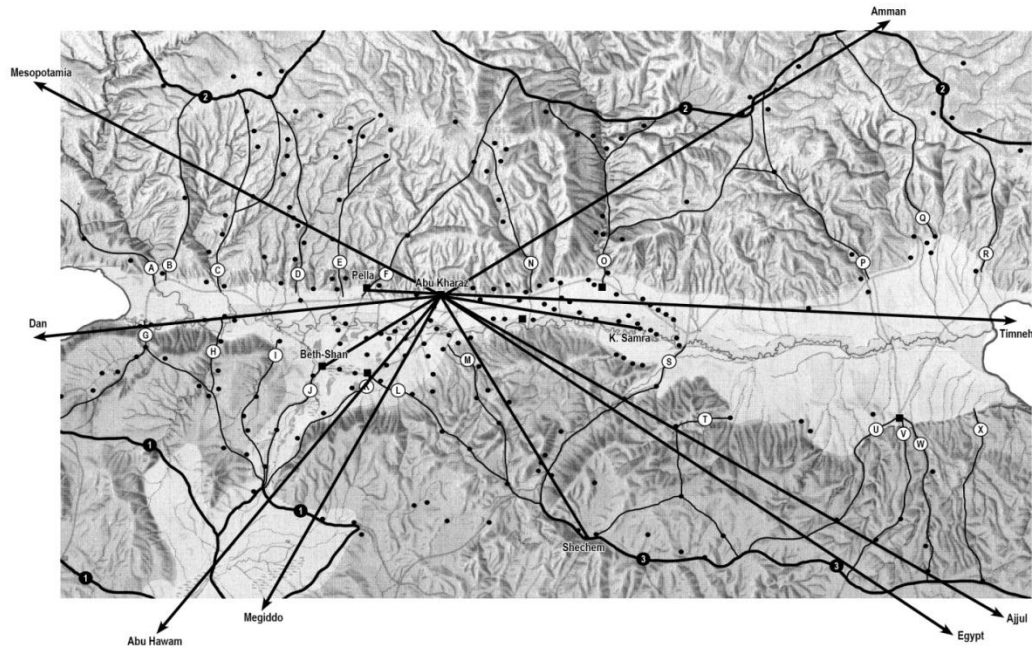


Figure 4.12: Abu Kharaz connection points
 Abu Kharaz was well connected on the regional and international scene. It is the only Jordan Valley site with a connection south of the Dead Sea (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

International points of connection for Abu Kharaz:

- Northern Levant: Several Bichrome-decorated jugs whose petrography reveals they were produced on the Lebanese coast between Beirut and Juniah were found in the Phase IV/1 context (Fischer 1999:6-8). A stone stamp seal of two antelopes standing on hind legs, eating the leaves of a palm tree was found in the Phase VIII context (dating to the beginning of the 13th century). The motif and style match a number of Mittani seals from Nuzi and Ugarit that suggests it came from the northern Levant (Fischer 1999:356-357). A unique copper figurine representing a god was found in a pit filled with Phase VI-VII material. One foot is human, the other is from a lion. No parallels are known but it has the general appearance of other Canaanite figurines from Late Bronze Age Palestine, Syria and Egypt. In one hand, the figure holds a scimitar which is found throughout Mesopotamia, the Levant and Egypt. Regional samples of this type of weapon have been found at Beth-shan and in Amman from the second half of the Late Bronze Age (Fischer 1999:354);

- Aegean (via the port at Abu Hawam): Phases IV-VII all have samples of Cypriot imports. In Phase VII around the temple complex, Cypriot White Slip ware from the Troodos mountains (late Cypriot IIA through IIB) was found in the small temple structure (Fischer 2006:358, 369).
- Egypt: There is a surprising lack of any Egyptian ceramics, architecture or other artifacts;
- Broader trade network: Seven small amber beads from Phase IV/2 were discovered. Their structure and color suggests an origin from northern Europe near the Baltic Sea (most certainly these imports or the raw material for them came through several middlemen in the international trade network of their time) (Fischer 1999:357).

Regional points of connection for Abu Kharaz:

- Megiddo and Ajjul: A number of dagger blades were found in Phases IV/1 and V. The Phase IV/1 blades have direct parallels with those found at Megiddo and Tell Ajjul (as well as Jericho) from this same period. From the dagger collection, several bronze blades are parallel with Megiddo and Tell Ajjul (Philip 1989:416; Fischer 1999:353);
- Sahem Tomb: Blades from Phase V are similar to those from the Sahem tomb from the north plateau of Jordan which also parallel with those found in Megiddo strata VIII-VI (Fischer 1999:353);
- Southern Levant: A glass based figurine of a nude goddess with her arms at her sides was found from Phase VII near the temple ruins. Its style is very similar to those found throughout the southern Levant (Fischer 1999:357);
- Tell Batash/Timnah in the Arabah: Phase VI had a krater almost identical to one found at Batash/Timnah (Fischer 1999:369).

Local points of connection for Abu Kharaz:

- Northern Jordan Valley: Several pieces of the Chocolate-on-White ware from Phase IV/1 and /2 have parallels with the Amman Citadel in the east and Tell Dan in the west (Fischer 1999:20), examples from Phases IV-V parallel with

Pella (Tomb 62-early Late Bronze Age), Beth-shan, and Shechem (Fischer 1999:366);

- Beth-shan and Pella: All Late Bronze Age Phases have parallels with Beth-shan and Pella, most are common pottery pieces (i.e. cooking pots and bowls);
- Jericho: In Phase IV/1 dagger collection, one blade parallels one from Jericho's early Late Bronze Age (other blades in the find parallel with Megiddo and Tell Ajjul) (Philip 1989:416; Fischer 353);
- Kataret Samra: A number of the Chocolate-on-White ware has been petrofabric analyzed showing a specific provenance from Kataret Samra in the Zerqa Triangle (Fischer 1999:8,13).

4.2.1.5 Tell Hayyat and a second temple at Wadi Rayyan

Tell Hayyat is small-sized farming village on a rich alluvial pan seven kilometers southwest of Pella. Occupation at the site was primarily during the Middle Bronze Age before it was abandoned around 1500 in the early Late Bronze Age.

(http://www.fas.harvard.edu/~semitic/wl/digsites/Transjordan/TellelHayyat_03/ accessed 23 September 2011).

The site was excavated by the University of Arizona under the direction of Falconer in three seasons, 1983-1984. In 2005, excavators uncovered a large structure with one meter wide walls which the University of Sydney excavators defined as a Migdol Temple. Pottery included Chocolate-on-White ware and White Slip burnished ware dating the structure to the Middle Bronze/Late Bronze Age transition (Falconer 1987:255-256). Donnelly and Fraser from the University of Sydney suggest the structure was a border temple, possibly defining the southeast border of Pella (<http://7icaane.org/w3jordan.html>. Accessed 23 September 2011). The site appears to have been a small agricultural town with Middle Bronze Age industries of metal work and ceramic production in order to supply the main trade markets at Pella (Ilan 1995:306). Tell Hayyat has been identified as a probable site of Chocolate-on-White ware pottery production from clay analysis (Falconer 1987:255-256).

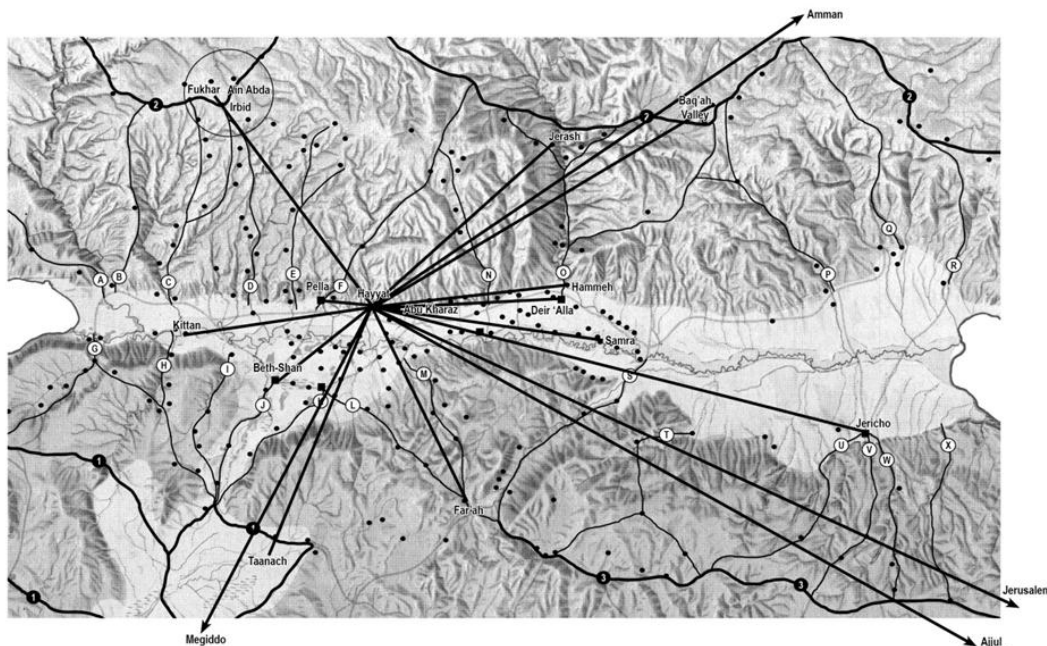


Figure 4.13: Hayyat connection points

At the dawn of the Late Bronze Age, Tell Hayyat was well connected throughout the region, even with Jericho. The site was abandoned in the first part of Late Bronze Age I (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

Local points of connection for Tell Hayyat:

- Tell Kittan and Kfar Rupin: Rural sanctuary temple floor plans and chronological continuation from Middle Bronze Age and similar abandonment at the end of the Late Bronze Age I (Nakhai 2001:98-99, 112-115, 118, 135-136; Falconer 1995:403);
- Chocolate-on-White ware for:
 - Pella: Large numbers of Chocolate-on-White ware (especially from Tomb 62)
(McNicoll et al 1992:69-76;
<http://www.jstor.org/pss/1357613> accessed December 4, 2011;
Hennessy 1985:110-113);
 - Abu Kharaz: Many examples of this excellently finished black and red decorated Chocolate-on-White ware including bowls, kraters, jugs and jars were found during the 1995 and 1996 dig at Abu Kharz in the kitchen area. In 1996, a group was found near a potter's wheel (Fischer 1997:18; Fischer 1991:96-97; 1993:292-294; 1994:130; 1995:97-98, 111-113);

- Deir 'Alla (Franken 1992:152);
- Kataret Samra (Leonard 1992:179-195);
- Tell Sa'idiyeh (Van der Kooij 2006:47);
- Rehob: Stratum D-11 (Mazar et al 2005:202).

Regional points of connection for Tell Hayyat:

- Architectural similarities with other Migdol Middle Bronze Age II temples of Shechem, Megiddo, Hazor, Tell Far'ah North (Nakhai 2001:98-99, 112-115, 118, 135-136; Falconer 1995:403);
- Chocolate-on-White ware;
- Tell Fukhar (Kafafi 2007:391);
- Amman Plateau (McGovern 2004:290ff);
- Baq'a Valley (McGovern 1986:68);
- Tell en-'Abada (Fischer spring 1995 expedition unpublished);
- Megiddo (cf. Fischer 1999; 2006);
- Ta'anach (cf. Fischer 1999; 2006);
- Jerusalem (cf. Fischer 1999; 2006);
- Tell Dan (cf. Fischer 1999; 2006);
- Lachish (cf. Fischer 1999; 2006);
- Ajjul (cf. Fischer 1999; 2006);
- Tell Far'ah (cf. Fischer 1999; 2006).

A second temple in the Wadi Rayyan: In 2005, Donnelly and Fraser (University of Sydney) and Lovell (Council for British Research in the Levant) conducted a small scale excavation at Khawarij at the mouth of Wadi Rayyan, just north east of Tell Hayyat. The team uncovered a large stone structure with one meter wide walls. The structure is similar to the Migdol Temple at Tell Hayyat. The excavation team suggests that the site is a small temple complex marking the southern boundaries of Pella's territories. Ceramic finds represented the late Middle Bronze/Early Late Bronze Age Chocolate-on-White and other White Slip burnished styles (cf. <http://7icaane.org/w3jordan.html> accessed 18 October 2011).

4.2.1.6 Tell Kittan/Tell Musa

Tell Kittan is located on a strategic hilltop on the west bank of the Jordan River, 12 kilometers north of Beth-shan and 15 kilometers south of the Sea of Galilee. The ancient site occupied about 1.5 acres on the hill's summit and 2.5 acres at the foot. Excavations by the Israeli Department of Antiquities, under the direction of Eisenberg, carried out five seasons of excavations between 1975 and 1978. Ten occupation layers were identified from the Chalcolithic to Mamluk periods. After a long gap from Early Bronze Age I, the site was resettled in the Middle Bronze IIA Age. A large temple complex was uncovered on top of the hill that went through various stages throughout the Middle Bronze Age (strata V-IV). After the destruction of the final Middle Bronze Age settlement, the site was resettled at the beginning of the Late Bronze Age (stratum III). A new temple was erected over the foundations of the Middle Bronze temple but with an entirely different plan. The site was abandoned towards the end of the Late Bronze Age I (the excavator suggests it was due to one of Thutmose III's campaigns [Eisenberg 1977:80]) and the temple was not rebuilt. Stratum II produced a large number of ceramics, beads and jewellery. Although the pottery report has not been published, preliminary reports describe several pieces of Chocolate-on-White ware (cf. Eisenberg 1977; 110,136).



Figure 4.14: Tell Kitan and Kfar Rupin connection points

Both Tell Kitan and Kfar Rupin have sparse Late Bronze Age connection points. This is most likely due to their abandonment as a site in the early Late Bronze Age and the small size of the site and excavated areas (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

Local points of connection for Tell Kitan:

- Northern Jordan Valley: Chocolate-on-White ware from strata IV-III (Fischer 1999; 2006);
- Tell Hayyat: Regional temple parallels contemporary with Tell Hayyat, abandoned during the same period (Nakhai 2001:98-99, 112-115, 135-136; Falconer 1995:403);
- Kfar Rupin: the temple sanctuary, floor plan and pottery are parallel between both sites of Kfar Rupin and Tell Kitan (Gophna 1979:29-32; Falconer 1995:403).

4.2.1.7 Tell Ubeidiya

Tell Ubeidiya, located two miles south of the Sea of Galilee in the Jordan Valley was lightly excavated by Aharoni in 1960-1963. Aharoni reported a Late Bronze Age occupation level but did not produce any detailed reports (Hasel 1998:147).

4.2.1.8 Kfar Rupin

Kfar Rupin is a small site 17 kilometers south of Tell Kittan on the west bank of the Jordan River. The settlement was a small farming village occupied in the Middle Bronze IIB period. Building C, in the center of the settlement, was a 6 x 5 meter building enclosed in a 12 x 6 meter courtyard. Its floor plan and pottery resembles the fortress temple at Tell Kittan (Gophna 1979:29-32). See Figure 4.14 for connection points of Kfar Rupin.

The artifactual parallels reported at the sites of the northern section of the Jordan Valley demonstrate many connection points to other sites in the north and central sections of the Jordan Valley. Only a few connection points from the Middle Bronze Age/Late Bronze Age transition period have been reported for connection points of artifactual parallels to Jericho in the south section. This suggests that the trade of the Jordan Valley was divided between two sections. The north and central section was one division of commerce and the south a separate isolated division. The north section is well connected with both the eastern and western highlands as well as to farther international points demonstrated by the many points of connections via artifactual parallels.

4.2.2 Excavations in the Central Jordan Valley

4.2.2.1 Tell Deir 'Alla

Tell Deir 'Alla was first reported and explored as an archaeological site by Merrill in 1881 and later by Glueck in 1940. The first major excavation at the site was conducted by the University of Leiden under the direction of Franken. The first series of excavations were carried out in 1960-62, 1964 and 1967. From the 1970s till the present, excavations have continued in a partnership between the University of Leiden, Yarmouk University in Irbid and the Department of Antiquities of Jordan directed by Ibrahim and Van der Kooij, not just at Tell Deir 'Alla but as the Deir 'Alla Regional Project, covering the whole Wadi Zerqa triangle.

Franken had participated with Kenyon at Jericho and the goal of the first five seasons (1960-1967) at Tell Deir 'Alla were to apply Kenyon's method to map out the

stratigraphy of the Late Bronze-Iron Age levels in a format similar to the one that Kenyon had done at Jericho for the Neolithic to Middle Bronze Age stratigraphy. A high focus was placed on local ceramics and

...the imports (or suspected imports) were given short shrift and the typology of locally-made ceramics were organized according to features related to manufacturing techniques rather than stylistic categories used at other sites, making comparative work difficult (Higginbotham 2000:94).

Still, many comparisons and relations to other sites can be made.

After a gap following the 1967 war, excavations were resumed by Franken in 1976 with the goal of exploring the Late Bronze Age sanctuary uncovered in previous seasons and the adjoining Iron Age structures where the Balaam inscriptions were found. Since 1979, excavations have been co-directed by Van der Kooij and Ibrahim, first in cooperation with the Department of Antiquities of Jordan and, since 1980, with the Yarmouk University. The mid-1980s focused on the Late Bronze Age levels and key finds included several more inscribed tablets as yet to be deciphered. The 1994-2004 seasons were co-directed by Van der Kooij and Kafafi. The focus of these last five seasons was on the domestic houses built on the southern slopes which did not yield any imported pottery (Kafafi 2009:127). Some heavy walls were found, but no structures or buildings could be reconstructed, partly because of the limited area of excavation. More clay tablets have been found of the same nature as those found by Franken, and some collared rim jars. None of these finds have been published (Van der Steen 2004:45). A test trench in one of the gullies on the south slope has revealed the presence of the earliest phases of the Late Bronze Age (cf. Ibrahim and Van der Kooij 1997 and Kafafi 2009:127).

The Middle Bronze Age settlement was built on a small hill along a possible branch of the Zerqa/Jabbok River (north of the tell at a depth of -2.31 meters, below the present surface where Franken found an ancient river bed cutting its way towards the Jordan River). The Late Bronze Age Levels A-D are built on top of the Middle Bronze foundations and the raised area was expanded by building a holding wall and filling the area to create a large elevated platform. Parts of this artificial platform were built up over six meters from ground level (Van der Kooij & Ibrahim 1989:79). A

large building deemed a 'sanctuary' (due to the number of cult items, fine pottery and an altar found in the building) with adjoining store and work rooms was uncovered in the first few seasons by Franken. Strata A-D had no destruction layers separating them and it appears that the rebuilding and raising of the floor levels was simply to keep the sanctuary higher than the surrounding structures. Stratum E was destroyed by a violent quake that totally devastated the site. Large cracks were made throughout the underlying strata with some sections dropping between 30 and 100 centimeters. Matching pottery pieces were found in the debris of different rooms, meters apart. Rebuilding at the site began immediately and the destruction level of stratum E is clearly marked by pits dug into the rubble layer (possibly looking for people or objects) (Van der Kooij & Ibrahim 1989:76-77). The rebuilding of the sanctuary (Level F) was not completed due to the destruction of another earthquake (debris remains were found blocking doorways that were never cleared). After the second earthquake, a fortified structure was rebuilt on top of the Tell (Levels G-H) but this was short-lived and destroyed by fire. Phases A to D were dated by Franken to the 16th to 13th centuries (Franken 1992:1). Phase E immediately followed Phase D.

The sanctuary building existed throughout the 16th to 12th centuries. The building falls into the general architectural style of the Langbau temples⁵⁴ (Franken 1992:166). The last phases (E and F) of this sanctuary have been excavated most extensively. In these phases, the sanctuary was surrounded by 'treasuries' containing the pottery and other items used in the sanctuary, service rooms, a kitchen and storage rooms (Franken 1962:163ff). Many Egyptian and north Syrian objects as well as Mycenaean pottery were found in these rooms (Homes-Fredericq & Franken 1984:140; Franken 1992).

⁵⁴ A broad temple style that is rectangular with three distinct architectural units: the ulam (porch), the heikal (shrine/sanctuary) and the debir (the holy of holies). It has a straight axis between the entryway and the innermost shrine. This style of temples appeared in the southern Levant in the Middle Bronze Age. Middle and Late Bronze Age temples of this style in the southern Levant have been found at Tell Balatah (Shechem), Megiddo, Hazor (maybe Pella?) (cf. Lundquist 2008:48-54; Wright 1985:227-228).

For the purpose of this thesis, Levels A to E are of prime interest and fall within the main dates of the Late Bronze Age that this research follows. Most of the artifacts come from Level E which is given an end date shortly after 1180 BC due to a stone vase with the cartouche of Queen Twosret of Egypt (1194-1188) that was found in the earthquake rubble.

Table 4.3: The stratigraphy of Tell Deir 'Alla (Steiner & Van der Steen 2008:17)

Late Bronze Phase	Date	Iron Age Phase	Date
A-D	16th-13th century BC. The first four phases of the sanctuary	A-D	Second half of the 12th century BC
E	The fifth phase of the sanctuary. Destroyed by an earthquake and fire. Destruction dated by a cartouche of Queen Twosret to after 1180 BC	A ⁵⁵	Accumulation of wash and courtyard layers. At the end of this phase the first furnace was built. Large fortress structure suggests threats in this period. Second major new style of pottery after Late Bronze G
F	Rebuilding of the sanctuary which was destroyed by another earthquake before it was finished	B	Accumulation of mostly wash and courtyard layers. Three more large furnaces were built. Remains of a heavy building
G-H	Fortified structures to the east of the sanctuary. These were short-lived and violently destroyed by a fire. Major new style of pottery at beginning of Phase G	C-D	Some slight rebuilding, flimsy walls

The typology of the pottery of Phases A-D is all Late Bronze Age except for a few pieces of Cypriot pottery in Phase D (Franken 1992:11). The bulk of the Deir 'Alla pottery falls into four groups. Two of the groups are of local production using material close to the site (Franken 1992:105). One large group of pottery is made from basalt (Franken 1992:109, 113-114). The two closest sources of basalt are north in the Bashan/Golan and southeast of the Madaba Plateau by the Ma'in Hot Springs. Another large group of pottery is shale-tempered and is very similar to 'Midianite'

⁵⁵ The architecture of Iron Age A resembles that of Tell Hammeh Phase 3 (therefore earlier phases of Tell Hammeh should correspond with Late Bronze Age) (Steiner & Van der Steen 2008:90).

pottery from east Jordan. The closest shale deposits in this group are found south of Wadi Barqa, 100 kilometers south of the Dead Sea (Franken 1992:112-113; Steiner & Van der Steen 2008:19-20; cf. Homes-Fredericq & Hennessy 1989a:201).

Most of the pottery in Franken's reports is not listed by style or finish but by the material from which it was manufactured. Franken's initial purpose for the Deir 'Alla excavations was to study the ceramics from the Late Bronze and Iron Ages in order to establish a clear chronology. Franken focused not only on the material of the pottery but on how it was made. In the early 1960s, it was assumed that the pottery from the East Bank would be identical to that found on the West Bank. Franken and Kalsbeek established that there is a clear distinction between Transjordanian pottery styles and Palestinian pottery. It is clear that the traditions are related to each other but they are not identical (Van der Kooij & Ibrahim 1989:80).

After Phase F, in Phases G-H and transitioning into the Iron Age, the pottery manufacturing techniques make a distinct change (to a slow wheel and in preparation of the pastes, the slips and the fillers). Painting is no longer done by the end of the 13th century (cf. Homes-Fredericq & Hennessy 1989a:202-205). Franken attributes this change to gradual technological and stylistic developments within a stable population group (Franken 1992:3). Fendo attributes it to a new population group such as the Gadites (based on Joshua 13:24-28 and the Meshe Stele) (Steiner & Van der Steen 2008:21, 94, 104-106). A second major shift in pottery styles occurs in Iron Age I Phase A. Fendo suggests that, between Late Bronze A-E, G-H and Iron Age I A, there were three distinct cultural changes that occurred on the site (Steiner & Van der Steen 2008:94-96). At the transition between Phases G-H and Iron Age A, Stein and Van der Steen conclude that

...at the beginning of the twelfth century BC a new group of people settled on Tell Deir 'Alla. The pottery they used was more closely connected to the east than to the west. The remains of the first Iron Age Phases on the tell, Phases A-D, suggest that these people lived mostly in tents, and may have used the tell only on a seasonal basis. They were probably pastoralist. The furnaces in Phase A and B suggest involvement in the bronze industry as well (Steiner & Van der Stein 2008:23 cf. Dornemann 1982:139).

The architecture style, structure and function of Phases A-E are all the same. The only difference between Phases A-D and E is the variety of artifacts. Phase E has the greatest amount and variety (Steiner & Van der Steen 2008:22). However, Phase E has been excavated much more extensively than the earlier phases so the greater amount of artifacts in Phase E is to be expected. The buildings of Phase G have plans that differ completely from the earlier ones. Phase G was destroyed by fire. The last Late Bronze Age Phase, H, consisted of a tower-like building set on Phase G remains, west of the sanctuary (Franken in Steiner & Van der Steen 2008:29, 97).

When searching the Late Bronze Age cemetery on the north side of the tell, Franken found that the present surface of the Ghor was, on an average, two meters or more above the level of the valley floor of the Iron Age. Realizing the Iron and Late Bronze Age valley floor was buried under at least two meters of alluvium, searching for the cemetery stopped. Deposits of alluvium as a result of winter floods and mud flows have made a big impact in the Zerqa triangle and have potentially covered many small ancient settlements. 'Before modern irrigation started one could still trace a dip in the surface where once there must have been another branch of the Zerqa River, running straight west along the tell' (Franken in Steiner & Van der Steen 2008:29, 97).

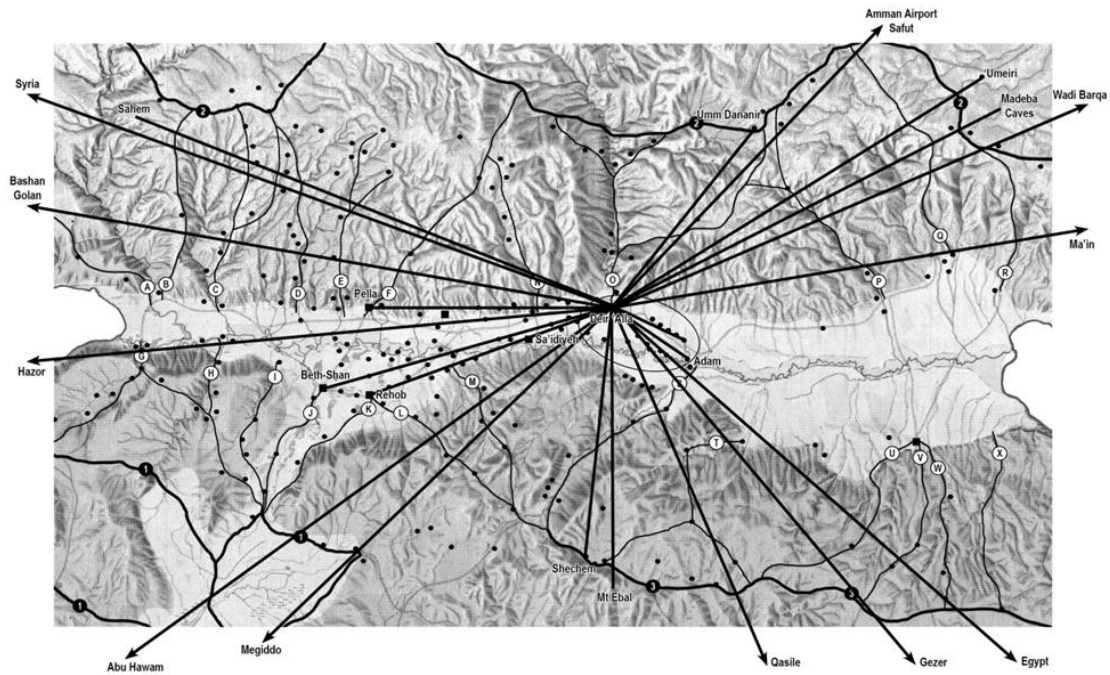


Figure 4.15: Tell Deir 'Alla connection points

The many connection points of Deir 'Alla reflect the strategic nature of the site at the mouth of the Wadi Zerqa. The oval around the Zerqa Triangle and unlabeled connection line within the oval represents numerous connections points to the many sites within this area. These sites are listed in section 4.2.2.2 (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

International points of connection for Tell Deir 'Alla (primarily from Phase E):

- The Aegean-Mycenaean vessels found in the sanctuary and 'treasury': The style of two of the vessels suggest they were in circulation for at least fifty years before being located in their final resting place (Steiner & Van der Steen 2008:64; Kafafi 2009:127);
- Egypt: Scarabs and Amulets from the 18th and 19th Dynasties, one bearing the name of Thutmose III (Ibrahim & Van der Kooij 1986:142; Van der Kooij & Ibrahim 1989:79; Franken 1992:58). Egyptian game pieces made of faience of Phase IX (Ibrahim & Van der Kooij 1986:141). Egyptian pottery, one faience drop vase bearing the cartouche of Queen Twosret. Cylinder seals in Egyptian-style motifs (Franken 1992:30). Cylinder seal in Ugarit-Recent I style (1550-1450 BC) (Franken 1992:28). Trade to Egypt most certainly went in both directions for Deir 'Alla formed the gateway to the horticultural produce of resins, balsam and precious oils that were traded in Egypt (Genesis 37:25) (Van der Kooij & Ibrahim 1989:79);

- Syria and Mesopotamia: Irano-Scythian arrowhead (Ibrahim & Van der Kooij 1986:134). Cylinder seals from north Syria (Steiner & Van der Steen 2008:64). Ugarit clay house models (Negbi 1991:214).

Regional points of connection for Tell Deir 'Alla (primarily from Phase E):

- The Sanctuary classification of a Langbau temple loosely associates it with Meggido, Shechem and Hazor (Franken 1992:166);
- Hazor: Chalices with outward pointing rims fouled down (Grutz 2007:11,34). Clay house models (Negbi 1991:214);
- Meggido: Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- The basalt pottery group connects Deir 'Alla to the Bashan/Golan in the north or the area of Ma'in southeast of the Madaba (Franken 1992:112-113; Steiner & Van der Steen 2008:19-20; cf. Homes-Fredericq & Hennessy 1989a:201);
- The heavy shale pottery group similar to 'Midianite' pottery from east Jordan connects Deir 'Allah to the east and south of Jordan, as far south as Wadi Barqa, 100 kilometers south of the Dead Sea (Franken 1992:112-113; Steiner & Van der Steen 2008:19-20; cf. Homes-Fredericq & Hennessy 1989a:201);
- Tell Qasile (Tel Aviv): Chalices with outward pointing rims fouled down (Grutz 2007:11). From the transition period of Late Bronze to Iron Age, a set of loom weights match in exact size and shape to a set from Tell Qasile (Ibrahim & Van der Kooij 1986:138);
- Gezer: Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Mount Ebal: Two styles of bowls with three holes forming a triangle in the handle are parallel with examples from Mount Ebal (cf. Van der Steen 2004:51-52; 126-127);
- Tell Balata/Shechem: A painted biconical jar with no neck and flaring rim (Van der Steen 2004:127);
- The Baq'ah Valley: Ceramics from Umm Dananir (Van der Steen 2004:120).

Local points of connection for Tell Deir 'Alla (primarily from Phase E):

- Pella: Cooking pots that appear in the Late Bronze Age Phase G to Iron Age A transition are 'directly evolved' from the Late Bronze Age repertoire found at Pella (Van der Steen 1996:61). Late Bronze Age Phase E is also closely related to the pottery repertoire of Pella, shortly before Pella's destruction in 1200s (Van der Steen 1996:66). Chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Tell Sa'idiyeh: Chalices with outward pointing rims fouled down (Grutz 2007:11, 34);
- Rehob: Chalices with outward pointing rims fouled down (Grutz 2007:11, 34);
- Beth-shan: Chalices with outward pointing rims fouled down (Grutz 2007:11, 34);
- Kereimeh: Two styles of bowls with three holes forming a triangle in the handle are parallel with examples from Phases E and F (cf. Van der Steen 2004:51-52; 126-127, 164);
- Beth-shan: Chalices with outward pointing rims fouled down (Grutz 2007:11, 34). Numerous metal objects.

Deir 'Alla's location on the Wadi Zerqa routes up to the highlands and the roads to Beth-shan and beyond gave it an ideal/strategic location to function as a gateway between Egypt and the eastern highlands. Although many Egyptian artifacts have been found at Deir 'Alla, the material culture, particularly the ceramic record is characterized as Jordanian rather than Palestinian (Steiner & Van der Steen 2008:63; cf. Franken 1992:152-162; Van der Kooij & Ibrahim 1989:80; Kafafi 1977:464-465). Deir 'Alla in the Late Bronze Age appears to have a much closer connection with the eastern highlands than its western trading partners. The large area of pots from the eastern highlands points to an extensive trade network.



Figure 4.16: Deir 'Alla tablets

Several of the clay tablets found in the 1994 season

(<https://openaccess.leidenuniv.nl/bitstream/handle/1887/15866/08%20ASLU%2019%20Chapter%208.pdf?sequence=14125> page 127 accessed 12 December 2011).

The tablets found at Deir 'Alla are readable but still untranslatable. The two main thoughts on the script are 1) they are related to Aegean groups (Tubb is a proponent of this group) and 2) they are related to Semites (Franken leads this group). Neither Tubb nor Franken base their reasoning on linguistic evidence but on their understanding of the economic and political environment of Late Bronze Age Deir 'Alla (cf. Van der Steen 2004:17; Knauf 1987:14).

4.2.2.2 Tell Deir 'Alla and Zerqa Triangle Project

The partnership for excavating at Tell Deir 'Alla is between the University of Leiden, the University of Yarmouk at Irbid, and the Jordanian Department of Antiquities. The excavation has expanded to cover the whole Zerqa Triangle, roughly the alluvial pan of the Wadi Kufrinjah to the north and the Wadi Zerqa to the south and the Jordan River to the west. A number of Late Bronze Age sites, Ammata, Kharabeh, Ghazaleh, Mazar, Nkheil, Qa'adan, Abu Nijrah, Hammeh, Arqadat and Kataret Samra, have been identified in this area. It is assumed that all these settlements were related and interacted with each other (Steiner & Van der Steen 2008:21). Surveys and small scale excavations have revealed Late Bronze Age occupation at many of the sites in the Zerqa Triangle Project. The small amounts of artifacts (often broken pieces of pottery) only allow for a few sites to be artifactually connected with one another:

- Tell Kereimeh: A small cooking pot parallel with Deir 'Alla Late Bronze Age Phases E and F (Van der Steen 2004:164);
- Tell Qos: Several bowls parallel with Deir 'Alla Late Bronze Age G-H and Early Bronze A and Pella Early Iron Age (Van der Steen 2004:168);
- Tell Ammata: Open bowl bases from the Late Bronze Age or very beginning of the Iron Age with parallels at Deir 'Alla Late Bronze Age Phase E, Beth-shan VII and Umm Dannanir Cave A2 and B3 in the Baq'a Valley (Van der Steen 2004:170);
- Tell Kharabeh: Fragments of Chocolate-on-White ware (Van der Steen 2004:170);
- Tell Ghazaleh: Bowl and kraters parallel with Tell Sa'idiyeh strata IX and VII, Deir 'Alla late Bronze Age Phases D and E, Beth-shan and Umm Dannanir Cave A4 and B3 (Van der Steen 2004:171-173);
- Tell Qa'adan: Cooking pots parallel with Deir 'Alla Late Bronze Age Phase B (Van der Steen 2004:174);
- Tell Arqadat: A carination bowl diagnostic of Late Bronze Age I-II with parallels at Deir 'Alla Late Bronze Age Phase E (Van der Steen 2004:178);
- Tell Rikabi: A chalice with parallels from Deir 'Alla Late Bronze Age Phase D (Van der Steen 2004:179);
- Tell Asiyeh: A White Slipped open bowl dated to the Late Bronze Age II with parallels at Pella. A cooking pot and krater with parallel at Umm Dannaniir cave B3 (Van der Steen 2004:179);
- Tell Zakari: A deep bowl and pink slip ware with parallels at Umm Dannaniir Cave B3 (Van der Steen 2004:181);
- Tell Damiyeh/Adam: As part of the Deir 'Alla Regional Project started in 2004 with Van der Kooij and al-Ghul. Limited excavation at small sites around Tell Deir 'Alla and systematic surface surveys. Compare findings with other limited excavations at Tell Mazar (excavated by Yassine 1984; 1988), Tell Hammeh (Van der Steen 2001; 2004) focusing on the Iron Age.

Petit conducted three soundings on the edge of Tell Damiyeh on the southern side of the mound. Eleven different phases were identified. At the

foot of the mound, the project dug three meters and did not reach virgin soil. Nothing has been published except for a few short paragraphs reporting a cuneiform bulla and Iron Age IIC pottery parallel with Deir 'Alla Iron Age Phase F-G (Kaptijn & Petit 2006:95-96). Glueck, Melleart and the East Jordan Valley Survey each reported Late Bronze Age pottery in their surveys. Glueck reported an open bowl with red painted lines from the transitional Late Bronze-Early Iron Age transition that was parallel with finds he made at Pella (Glueck 1951:330-331; Melleart 1962:148; Ibrahim, Sauer & Yassine 1988:191);

- Um Hamad Sharqi: Several kraters with parallels at Tell Sa'idiyeh Stratum XI and Megiddo Late Bronze Age (Van der Steen 2004:183);
- Tell Bashir: A krater with a parallel at Umm Dannaniir Cave B3 (Van der Steen 2004:185);
- Tell Hammeh and Katarat Samra are also within the Zerqa Triangle Project but are treated separately as material from these sites is more substantial.

The many sites of the Zerqa Triangle appear to be connected to and even satellite sites of Deir 'Alla. Although few in-depth excavations have been in done at these smaller sites, their local and regional connections can be assumed to be reflected in the pattern of Tell Deir 'Alla's connections.

4.2.2.3 Tell Hammeh

Tell Hammeh was excavated in 1996 and 1997 by Van der Steen. The site is located on the Zerqa River three kilometers from Tell Deir 'Alla right at the entrance to the Wadi Zerqa. Earlier surveys (Glueck 1951; Gordon & Villiers 1983; East Jordan Valley Survey 1988) did not report any Late Bronze Age evidence. Van der Steen's excavations revealed occupation layers from Chalcolithic, Early Bronze, end of the Middle Bronze to the end of Iron Age II (Van der Steen 2004:191). The Late Bronze Age strata (Phases 2a and b) at Tell Hammeh contained little architecture but a number of samples of well-made luxury pottery 'suggesting an involvement in interregional trade' (cf. Van der Steen 2004:147-158,199).

The lack of architecture and the number of loose 'building stones' in this Phase led Van der Steen (2004: 147-158) to conclude that it was a temporary way-station or camping site for traders moving in and out of the Wadi Zerqa. The pottery repertoire of Phase 2a is typical of the end of the Middle Bronze Age and the first half of the Late Bronze Age: Chocolate-on-White ware, White Slip ware and jars and bowls with flaring rims and ring bases. Phase 2b contained traces of a cobbled floor and numerous fire pits. The pottery of Phase 2b was indicative of the second half of the Late Bronze Age and comparable to Deir 'Alla Phases E and F. A Cypriot milk bowl was the only imported piece found (cf. Van der Steen 2004: 147-158).

Specific local points of connection for Tell Hammeh:

- Northern Jordan Valley: Chocolate-on-White ware.

Regional points of connection for Tell Hammeh:

- Baq'ah Valley: Ceramics from Umm Dananir (Van der Steen 2004:120).

Specific international points of connection for Tell Hammeh:

- Aegean (via the port at Abu Hawam): – A Cypriot milk bowl was the only imported piece found (cf. Van der Steen 2004 147-158).

General Points of connection for Tell Hammeh:

Tell Hammeh's location at the mouth of the Wadi Zerqa and just three kilometers from Deir 'Alla strongly suggests that it functioned as a satellite community of Deir 'Alla. Van der Steen's interpretation of the site operating as a 'way-station' for trade passing through the Wadi Zerqa and the geographical and material parallels with Deir 'Alla (cf. Van der Steen 2004 147-158) would make these two sites almost identical in their connections with other sites.

4.2.2.4 Kateret Samra

The University of Missouri-Columbia did a one month excavation of Tell Kateret Samra and the adjacent Late Bronze Age tomb in January 1985. The excavation was supervised by Leonard. The tomb was a vertical shaft cut into the marl. It contained a dozen skeletons, a scarab, glass beads, bronze fragments and fifty intact or

restorable ceramic vessels. The ceramic material ranged across the full spectrum of the Late Bronze Age with a concentration in the 13th century. Two Cypriot type imports (Base Ring I and Base Ring II) were identified in the collection. The excavation on the tell revealed that it was indeed a tell and not a natural hill with multiple occupation levels. Mud brick walls were discovered but their foundation layers were not identified due to the short dig season. Leonard (1985:289) was 'amazed at the amount of Middle Bronze II-Late Bronze Age I material in the disturbed contexts and in the general survey of the summit' and suggested that a large pottery manufacturing industry must have been located on the tell or close by. A number of the Chocolate-on-White ware has been petrofabric analyzed showing a specific provenance from Kataret Samra (Fischer 1999:8, 13).

Local points of connection for Kateret Samra:

- Chocolate-on-White ware (Leonard 1991:179-195; Fischer 1999:8,13):
 - Pella: Large numbers of Chocolate-on-White ware were found (especially from Tomb 62) (McNicoll et al 1992:69-76; <http://www.jstor.org/pss/1357613> accessed December 4, 2011; Hennessy 1985:110-113);
 - Abu Kharaz: Many examples of this excellently finished black and red decorated Chocolate-on-White ware including bowls, kraters, jugs and jars were found during the 1995 and 1996 dig at Abu Kharz in the kitchen area. In 1996, a group of Chocolate-on-White ware ceramics was found near a potter's wheel (Fischer 1997:18; Fischer 1991:96-97; 1993:292-294; 1994:130; 1995:97-98, 111-113);
 - Deir 'Alla (Franken 1992:152);
 - Tell Sa'idiyeh (Van der Kooij 2006:47).
- Cypriot imports from the site are also parallel with:
 - Rehob: Stratum D-11 (Mazar et al 2005:202). Cypriot ware: Milk bowls, Base Ring I and II (cf. Van der Steen 2004 147-158) connects Kateret Samra with the main trading cities in the directions of the Jazreel Valley at a minimum;

- Beth-shan: Cypriot imports outnumber Egyptian style types (Oren 1973:87);
- Sa'idiyeh: Tombs 60, 127 and 241 contain only Late Bronze Age II Cypriot Base Ring II (Oren 1973:116, 130-131; Pritchard 1964:9; 1980:4, 5, 6, 7, 14, 16, 18, 19, 21). Two examples are Tomb 101 (originally dated to the 12th century by Pritchard 1980: 3-31; 38-40; 58-60) but redated by Oren to the 13th century and Tomb 117. Both contained similar bronze bowls and strainers of Cypriot ceramic imports (Pritchard 1964:9; Oren 1973:116);
- Pella: Cypriot Base Ring and White Slip ware (Potts 1987:79; McNicoll et al 1992:69-76). More examples were found in Tombs 1, 14 and 15 of the Wooster excavations and Tombs 20, 21 and 27 of the Sydney excavations which contained a marked increase in Cypriot and Mycenaean imports (from Late Helladic IIIa2 and IIIb1) amongst the standard Egyptian goods. Tomb 62 excavated in the fourth and sixth season contained over 2000 ceramic vessels (most of them intact) which were dated to the Late Middle Bronze Age IIC and Early Bronze Age I period. There was a large amount of Chocolate-on-White ware, several pieces of Cypriot wares along with a large repertoire of bronze weapons, jewelry and stone vessels (McNicoll et al 1992:69-76);
- Rehob: Cypriot Base Ring and White Slip ware from stratum D dated 13th century Late Bronze Age IIA (Mazar et al 2005:202);
- Deir 'Alla: Cypriot Base Ring and White Slip ware from Phase D (Franken 1992:1).
- Abu Kharaz: Late Cypriot IIA through IIB was found in the small temple structure of Phase VII (Fischer 1999).
- It is assumed by Van der Steen and others working on the Zerqa Triangle Project that all the neighboring sites interacted with one another (Steiner & Van der Steen 2008:21). This would include: Ammata, Kharabeh, Ghazaleh, Mazar, Nkheil, Qa'adan, Abu Nijrah, Hammeh, Arqadat and Kataret Samra which have been identified in this area.

Regional points of connection for Kateret Samra:

- Sahem tomb two-handled biconical jugs (Fischer 1997:38, 39).

Kateret Samra is one of the small satellite sites of Deir 'Alla in the Zerqa Triangle. It is one of the few sites in this group of satellites that has had several seasons of excavations. The rich finds with its many points of connection (reflecting those of Deir 'Alla) adds weight to the assumption that all the other small sites of the Zerqa Triangle are similar to Deir 'Alla.

4.2.2.5 Mazar

Tell Mazar is also within the Zerqa Triangle Project located 3 kilometers northwest of Deir 'Alla, 3 kilometers east of the Jordan River and 6.5 kilometers south of Tell Sa'idiyeh (all the sites from Deir 'Alla to Tell Sa'idiyeh are within easy sight of one another). Although relatively small in size (3000 square meters), Tell Mazar rises some 24 meters above the surrounding plain. The tell is apparently all man-made (Yassine 1984:76). Yassine directed three seasons of excavations with the University of Jordan in 1977, 1979 and 1981. Surface surveys show occupation from the late Bronze Age to the Hellenistic period. Yassine (1984:78) confirms that the Iron Age strata of Tell Mazar's stratigraphy corresponds to that of Tell Deir 'Alla and that the site had no independent existence from Deir 'Alla. The Bronze and Iron Age levels have not been published with the exception of a building 220 meters northwest of the main tell, on a low hill. Although Negbi made general reference to bronze items from Tell Mazar with parallels at Tell Dothan in a Late Bronze Age/Early Iron Age context and domestication installations representative of the Late Bronze Age (Negbi 1991:205, 230-231; Homes-Fredericq & Hennessy 1989:381), this researcher has not been able to find any further details. Yassine (1984) dates the building to Iron Age I according to parallels with Deir 'Alla pottery from Iron Age Phase F of Tell Deir 'Alla. Five occupation phases have been established each consisting of a layer of ash with charcoal, sherds and animal bones. Yassine labels this structure as a temple according to parallels with Beth-shan Phase VI temple storage areas but the lack of any temple floor plan leads Van der Steen to consider the site a large farmhouse (cf.

Yassine 1984:73-93, 115-135; Van der Steen 2004:45-46; Homes-Fredericq & Hennessy 1989b:381-384).

Specific regional points of connection for Tell Mazar:

- Tells Dothan, Megiddo, Lachish, Nami, Ajjul and Farah (south): A partial bronze wine serving set is mentioned and parallel to examples at these regional sites by Negbi (1991:205, 230-231).

Specific local points of connection for Tell Mazar:

- Tell Sa'idiyeh and Beth-shan Tomb 90: Single mention of partial wine serving set by Negbi 1991:205, 230-231).

The lack of further specific connection points listed for Tell Mazar are due to the fact that only a single preliminary report, focusing on the Iron Age material has been published.

General points of connection for Tell Mazar:

Yassine's observations of Tell Mazar's relationship to Deir 'Alla is similar to Fischer's regarding Tell Hammem and Deir 'Alla. If Yassine's conclusion that the Iron Age stratigraphy and pottery repertoire is identical to Deir 'Alla's Iron Age Phases and that Tell Mazar was a satellite site of Deir 'Alla (Yassine 1984:78), it is safe to assume that Tell Mazar's Late Bronze Age Phases would have similar local and regional connections. The site appeared to be peacefully but hastily abandoned towards the end of the 16th century (Hess 2007:131-132).

4.2.2.6 Tell Sa'idiyeh

Tell Sa'idiyeh is located in the central section of the Jordan Valley. It is a large double (upper and lower) mound of 20 acres. The upper mound rises 40 meters above the Ghor. The tell occupies a strategic position commanding a ford across the Jordan River and major east-west/north-south trade routes in the Jordan Valley. The Wadi Kufrinje runs along its south side. Glueck visited the site in 1943 and reported occupation levels from Early Bronze Age I through Iron Age II as well as Roman and Byzantine periods. In 1964, the University of Pennsylvania under Pritchard began a

planned ten year excavation project. After three seasons, the project was interrupted by the 1967 war. When resuming the dig in 1977, activity was quickly cancelled with the discovery of an unexploded ordinance from the war on the tell. The University of Pennsylvania identified and worked on all three strata on the lower mound (Early Bronze, Late Bronze and Iron Age). Pritchard's excavations focused on the Early Iron Age levels. On the upper mound, they only reached stratum VII of the early Iron Age, although they did uncover the staircase on the northern slope (which Pritchard simply dated as before stratum V) and conducted deeper soundings which identified older strata (Pritchard 1985:ii-xv, 54-55, 77-78). The British Museum began new excavations in 1985 under the direction of J. Tubb (Tubb 1985:131-132).

The excavations on the upper tell have not penetrated below strata XV which is dated to the end of the 13th century BC. Little is known between this period and Early Bronze Age I-II (2800-2400 BC) where excavations on the lower mound revealed the site was a major center for the manufacture and distribution of olive oil, wine-making and textile manufacturing that was clearly larger than the Jordan Valley market.

The main efforts on the upper mound by Tubb have focused on stratum XII which is the largest area excavated and the richest stratum where the architectural plan could be extensively developed. Most of the street and wall lines of the earlier three strata (XIII-XV) are the same as stratum XII but are of a much more construction quality suggesting the city was much less prosperous previous to XII. Moving into the Iron Age I, the city began to shrink considerably even as parts of it were rebuilt with a planned industrial section (probably for textile and dye production, due to the large number of loom weights, grinding stones and pottery pieces that were intensely stained with green and red material) (Tubb 1985:134) before being destroyed around the time of the Babylonian/Assyrian invasions (http://www.fas.harvard.edu/~semitic/wl/digsites/Transjordan/Saidiyeh_07/ accessed 8 October 2011).

Table 4.4: The stratigraphy of Tell Sa'idiyeh (Tubb & Dorrell 1991:69)

Strata	Date	Finds	Comments
Stratum XV	End of 13th century	Limited examination.	Poorly built architecture. Several complete pottery

		Most of the street and line wall remain consistent for Strata XV-XI, although building quality improves in later strata	vessels, including a collared-rim storage jar. Ended with a destruction layer
Stratum XIV	Beginning of 12th century	Limited examination	Similar architecture as earlier but with some evidence of Egyptian-style construction methods on parts of the tell. Significant quantities of Egyptian pottery. Ends without a destruction level and the appearance of being abandoned
Stratum XIII	12th century (1175-1150/ second quarter)		Similar wall and street lines as earlier. Cobbled and plastered floors. Construction methods are all local with no evidence of previous Egyptian influence. Many loom weights
Stratum XII	Destroyed around 1150		Distinct Egyptian architecture and Egyptian burials in contemporary cemetery
Stratum XIB	10th century		Small temple with tunnels going to Stratum XII 'Governor's Palace'

In the 12th century, Tell Sa'idiyeh appears to have transformed from a large local city with an agricultural and industrial base into an Egyptian administrative/garrison town (Strata XII). Egyptian influence/presence has been uncovered as early as stratum XIV. Egyptian construction methods of deep foundations and standardized mud bricks as well as large quantities of Egyptian pottery have been found. Stratum XIV appears to have been abandoned at the beginning of the 12th century. All revealed construction methods of Stratum XIII appear to return to local Canaanite practices of shallow foundations and the use of irregular stones (Tubb 1998:82-83).

In Stratum XII, the Egyptian influence/presence has returned in full force. A large Egyptian 'governor's residence' was built at the top and center of the tell. The structure is identical to the Egyptian governors' residencies at Beth-shan, Tell Sera and Tell Fara (south). A second large Egyptian complex of rooms, courtyards and cisterns (dubbed the Egyptian Palace) was uncovered along the western wall. An

intricate water system filled with Egyptian pottery sherds was attached to this complex. A stamp seal impression which the reverse side clearly shows that it was attached to a papyrus roll, was also found. An aqueduct system ran from the palace towards the northern slope in line with the grand staircase. Many Egyptian-style ceramic vessels (including beer bottles, funnel-necked jars, saucer bowls and many other styles dated to Late Bronze Age IIB) were found in various rooms of the Stratum XII palace (Tubb 1998:82-85).

A large finely built paved staircase (which was probably covered) descended the north slope to an underground pool with water in and out flow channels. A large amount of pottery from the last half of the 12th century (Stratum XII) was found in the pool. A platform at the bottom of the staircase gave access to the pool. The top of the staircase has disappeared (due to erosion) before it reached the top of stratum XII but it ends in the direction of, and near to, the 'governor's palace'. A second gallery (not connected to the staircase) gives access to the pool and must have had an entrance from another part of the city. The grand staircase of stratum XII is laid over a previous simpler and shallower staircase from an undetermined preceding stratum. The difference in the stratigraphy of the two staircases is complicated by a disruption of some 25 centimeters caused by general settling or seismic activity (Tubb 1995:19). The water-system including the aqueduct, staircase and pool/platform is unique to Canaan and Egypt. Tubb suggests the system is parallel to those in Tiryns and Mycenae and uses this fact to bolster his argument that a population of 'Sea People' had settled on the site prior to the 13th century (see double-pithos burials below and Tubb 1998:106).

The city of stratum XII had a large double casement city wall with well paved streets of cobble stone and mud-brick building units. A large chambered gate with a vaulted passageway was found in the city wall on the northeast corner. Buildings had stone-paved floors. Streets and alley-ways were paved with cobble stone. The city appears to have met a violent end. The gate was filled with destruction debris which was consistent with a thick layer of burnt mud-brick and timber in the buildings. The roads were generally clear of debris but several of the alley-ways off the main road were blocked by a heavy stone across the point of entry prior to the destruction,

preventing access from the street. The 'governor's residence' also appeared to have had its doors blocked prior to the destruction (Tubb 1996:30-3). Tubb dates the destruction around 1150-1120 BC (Tubb 1998:86).

The Cemetery of the Lower Mound: The lower mound consists of Early Bronze Age I and II strata and a large cemetery containing Late Bronze Age II-Iron Age I and Persian burials. These burials cut directly into the Early Bronze Age levels. This cemetery is one of the largest and densest in the southern Levant. Together, Pritchard (44 graves) and Tubb (460 graves) have excavated 500 burials. These burials range from the late 13th to 10th centuries BC. The graves fall into two socio-historical settings. The first (13th-12th centuries) correspond to the period of Egyptian domination. The second (11th-9th centuries) reflect 'a rise in local semi-independent polities in the Central Valley'.⁵⁶

Roughly two thirds of the burials are from the Late Bronze Age IIB transitioning into Iron Age I. This is contemporary to stratum XII on the upper mound (Pritchard 1980:15, 21-23; Tubb 1998:96-106). In these 300+ graves there are a variety of burial types including pit graves, cist tombs, double-pithos and infant jar burials. A great number of artifacts (ceramics, bronze pieces and jewellery of silver and gold) were recovered from the burials representing a diversity of cultures and trades. Elements of Aegean, Anatolian, Egyptian and local Canaanite features were all found in the Late Bronze Age IIB burials.

There is a large amount of Egyptian pottery amongst the burial goods. Some burial features suggest attempts at mummification; many burials showed traces that the bodies were wrapped in textiles. A few graves had the remains of Egyptian linen in which the bodies and burial gifts had been wrapped. Fewer still had been wrapped in linen and had either been dipped or rubbed in bitumen. The body in grave 101 had been dipped in bitumen and some outside edges had square corners indicating that

⁵⁶ Green, Jack. 2006. Abstract to unpublished PhD thesis, University of London, London. (http://chicago.academia.edu/JohnGreen/Papers/402119/Ritual_and_Social_Structure_in_the_Late_Bronze_and_Early_Iron_Age_Southern_Levant_the_Cemetery_at_Tell-es-Saidiyeh_Jordan accessed 10 October 2011).

the hot bitumen had been poured into a mold. Grave 117 was covered in bitumen. The body and burial goods were placed in the grave while the bitumen was still pliable. The graves which showed signs of mummification (wrapping with textiles and/or bitumen) had a much greater proportion of Egyptian or Aegean burial goods in them (Pritchard 1980:15, 21-23). A number of burials were of infants and young children.

A number of burials are in a 'double-pithos' style (two large storage jars being broken off at the shoulder with the body placed inside and then the jars were joined should-to-shoulder). This type of burial is very rare in the southern Levant. The only other sites with 'double-pithos' burials are Sahab and Jabal Qusur on the Amman Plateau, Kafar Yehoshua in the Jezreel Valley and Tell Nami on the coast (Negbi 1991:211). The lower mound cemetery has so far revealed 37 adult double-pithos burials and 57 similar single pithos infant/child burials. The closest area where double-pithos burials are the standard in the Late Bronze Age is in Anatolia. Tubb suggests that these burials predate and anticipate the slightly later anthropoid coffins from sites such as Beth-shan and Deir Balah and represent a population of 'Sea People'. Burial goods in these graves show only a slight favor of Egyptian goods over the more traditional 'local' burials (cf. Tubb 1998:96-106).

Due to the density of these 'foreign' burials and the fact that they contain women and children as well as men, Tubb argues that this foreign population represents a migration/settlement pattern as opposed to a mercenary force of Sherden at the battle of Kedesh and the 'Sea People' burials at Beth-shan, and that this Anatolian population was closely associated and integrated with the Egyptian administration (Dothan 1989:63; Tubb 1998:100-101; 2000:181-193).

The double pithos burials, the large number of bronze pieces of Aegean influence, the practice of binding the body in linen as well as the very high proportion of imitation Mycenaean local pottery may imply the presence of 'Sea Peoples' in the community.

The large number of burials using mud brick instead of stone for lining and covering of the grave, a typical Egyptian practice (Negbi 1991:210), the 'mummification' evidence of wrapping with Egyptian linen, the use of bitumen⁵⁷, the large amount of Egyptian grave goods contemporary with the Egyptian architecture on the upper mound all point to an established Egyptian population at Tell Sa'idiyeh. That Egypt during the final phase of the New Kingdom had a direct presence at Tell Sa'idiyeh seems a reasonable conclusion (Tubb 1998:97; Homes-Fredericq & Hennessy 1989b). There was a great variety of burial types and practices within the 13th century BC cemetery that suggest a mixed population of the site.

The cemetery stopped being used in the middle of the 12th century (around 1150 BC) and correlates to a major destruction layer on the upper tell at the same time (Tubb 1998:97; Homes-Fredericq & Hennessy 1989b:532).

The cemetery not only gives a rich material repertoire to work with but also gives a picture of an ancient society mourning their dead. The burials include a number of young infants and children. This author is especially reminded and moved by the common human experience shared across the centuries in the scene of Grave 27 (Tubb 1985:136). This burial is of a young girl about 5 years old. She was buried wearing a bronze anklet on each leg. On one wrist was a bracelet of small white paste beads and on the other one of carnelian and silver beads. Around her neck was a necklace of carnelian and silver beads interspersed with larger black stones. By her shoulder was a bronze fibula with a silver earring. Above her skull was a bronze clasp which was probably part of a hair ornament. Alongside her were silver and steatite finger rings, a bronze weaving spindle a finely engraved stamp seal and fine bowl with animals on it. Such a finely adorned burial for a young girl, neatly arranged in a prepared grave, gives a human connection beyond the sherds and bricks of this ancient site. Many other graves that cut into previous graves appear to have

⁵⁷

http://www.britishmuseum.org/explore/highlights/highlight_objects/me/i/fish_shaped_ivory_cosmetic_box.aspx accessed 14 October 2011.

reburials of the skull and long bones of previous remains in a seemingly sign of respect.

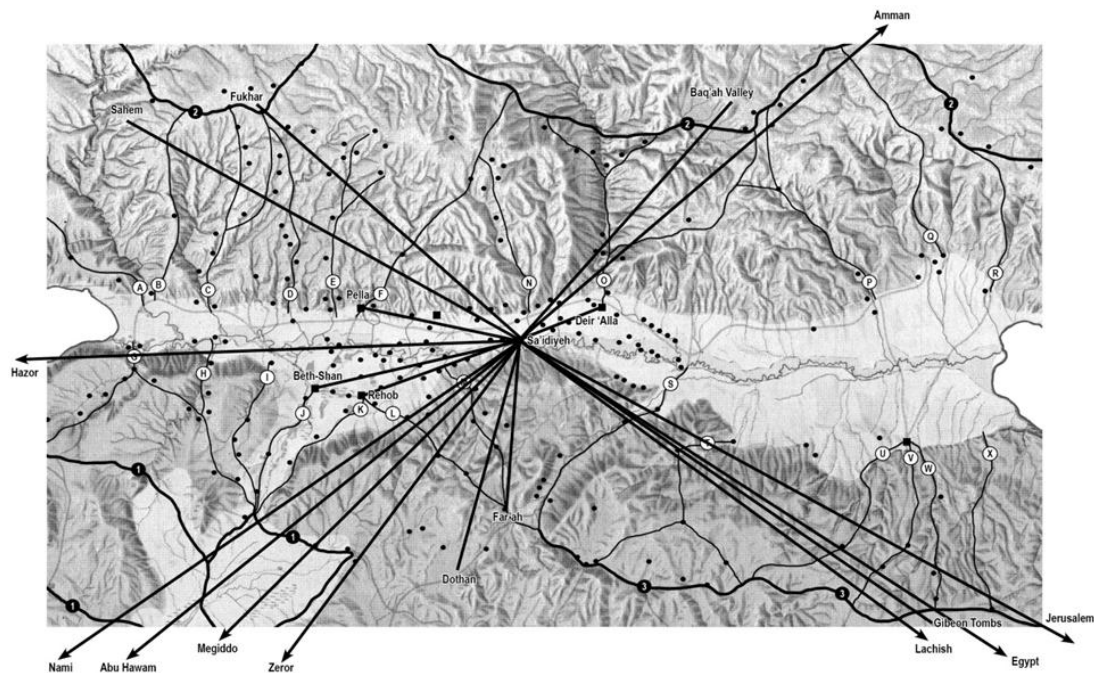


Figure 4.17: Tell Sa'idiyeh connection points

Tell Sa'idiyeh shows a number of connection points to the regional highlands and the larger international trade network (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

International points of connection for Tell Sa'idiyeh:

- Egypt: The parallels for ceramics, bronze pieces, scarabs (of the IXX Dynasty, especially of Ramesses II) come from a number of Egyptian sites (Tell Amarna, Deir Medineh and Gurob) (Pritchard 1980:16, 19, 48). Grave 32 produced a fine bronze three piece wine set comprising a bowl, strainer and juglet. This set is parallel with one found in Beth-shan and represented in an ivory plaque at Tell Far'ah and number of Egyptian 18th and 19th century monument scenes (including one at el-Amarna) (Oren 1973:115-117; cf. Van der Steen 2004:46-49);
- Aegean (via the port at Abu Hawam): Mycenaean III ceramics and bronze pieces (bronze tripod, cauldron and weapons), and Cypriot ceramics (Pritchard 1980:4, 5, 6, 7, 14, 16, 18, 19, 21). Two examples are Tomb 101 (originally dated to the 12th century by Pritchard (1980:3-31; 38-40; 58-60) but redated by Oren to the 13th century) and Tomb 117. Both contained

similar bronze bowls and strainers and Mycenaean and Cypriot ceramic imports found and dated to the 13th century (Pritchard 1964:9; Oren 1973:116).

Regional points of connection for Tell Sa'idiyeh:

- Tell Abu Hawam (Haifa): Ceramics of many different types (Pritchard 1980:3,5,7); chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Tell Nami (on the coast by Haifa) and Zeror (on the Sharon Plain): Double-pithos burials of a common foreign population (Gonen 1992:90);
- Megiddo: Ceramics of many different types, bronze items (Pritchard 1980:3, 6, 7, 8, 12, 17); chalices with outward pointing rims fouled down (Grutz 2007:11, 34); Levanto-Cypriot bronze pieces (Negbi 1991:221); Ivory spoons in the form of swimming girls from Grave 105 parallel with several tombs from Megiddo (Liebowitz 1987:12-13);
- Hazor: Ceramics of many different types (Pritchard 1980:3, 6, 7, 8, 9), chalices with outward pointing rims fouled down (Grutz 2007:11, 34);
- Lachish: Ceramics of many different types, bronze items, ivories (Pritchard 1980:3, 4, 12), a bronze lamp from Dothan Tomb 1 (Negbi 1974:164);
- Tell Far'ah (north): Ceramics of many different types (Pritchard 1980:3, 4, 5, 6, 7, 8, 9);
- Amman: Ceramics of different types (Pritchard 1980:5, 6);
- Jerusalem: Ceramics of different types (Pritchard 1980:5);
- Gibeon tombs: Ceramics of different types (Pritchard 1980:5, 7);
- Tell Fuhkar: Ceramics (Tubb 1998:101);
- Dothan: Bronze lamp from Dothan Tomb 1 (Negbi 1974:164);
- Baq'ah Valley: Iron weapons and jewellery from the burial assemblages (McGovern 1995:31);

Local points of connection for Tell Sa'idiyeh:

- Beth-shan: Ceramics of different types (Pritchard 1980:4, 6, 7, 8), chalices with outward pointing rims fouled down (Grutz 2007:11, 34). Levanto-Cypriot bronze pieces (Negbi 1991:221). Ivory spoons in the form of swimming girls from Grave 105 parallel with both Beth-shan and several tombs from Megiddo (Liebowitz 1987:12-13);
- Deir 'Alla: Ceramics of different types, clear examples are the deep bowls with folded-out rims from Deir 'Alla Late Bronze Age Phases E-G (Van der Steen 2004:122; Pritchard 1980:6,8), chalices with outward pointing rims fouled down (Grutz 2007:11,34);
- Tell Ghazaleh: Bowl and kraters (Van der Steen 2004:171-173);
- Um Hamad Sharqi: Several kraters (Van der Steen 2004:183);
- Pella: Chalices with outward pointing rims fouled down (Grutz 2007:11, 34).

The artifactual parallels reported at the sites of the central 'waist' section of the Jordan Valley demonstrate many connection points to other sites in the north section and none to the south. This suggests that the trade of the Jordan Valley was divided between two sections. The north and central section was a division of commerce and the south a separate isolated division. The north and central sections were well connected with both the eastern and western highlands as demonstrated by the many points of connections via artifactual parallels.

4.2.3 Excavations in the Southern Jordan Valley

The southern section of the Jordan Valley has 14 sites that have demonstrated Late Bronze Age material in surveys. Only a few sites have been excavated. The sites along the base of the eastern escarpment are relatively new in their excavations owing to the sensitivities of the Jordanian military up through the 1980s. Although most of the eastern sites have all shown Late Bronze Age pottery in surface surveys, excavations have not revealed any Late Bronze Age architecture or strata. Jericho stands alone on the west side as the one major excavation with Late Bronze Age remains.

4.2.3.1 Jericho



Figure 4.18: Tell Sultan (Jericho)

Jericho from Hilltop Restaurant looking east. Beyond the green belt from the local springs, the sterile floor of Ghor is lost in the haze before the eastern escarpment (photograph: David Q. Hall http://dqhall59.com/old_jericho.htm accessed April 17,2008).

Jericho is probably the best known and most controversial site in the Jordan Valley. Tell Sultan is universally accepted as the site identified as Old Testament Jericho. The site has occupation levels dating from the Neolithic to the Byzantine period.

The site has a long history of extensive archaeological digs and was the second site (after Jerusalem) to have modern scientific methodology applied to its excavation. Four primary expeditions from 1868 to the present have recorded and published (at least partially) their work from Tell Sultan and the surrounding tombs:

1. The Warren sounding of 1868. This expedition is hard to call an archaeological dig by modern standards. Warren dug six vertical shafts and three trenches on the Tell and established not only the occupation of Tell Sultan but that tells were indeed the remains of successive occupations and not natural hills (cf. Warren 1876:164-189).
2. The Austro-German expeditions of 1907-1909 and 1911 led by Sellin and Watzinger. This expedition was able to trace the Middle Bronze Age walls around three fourths of the tell. Sellin's carefully drawn plans and sections are a valuable resource to scholars today. Their dating has been revised

significantly (they labeled some Middle Bronze Age structures as being Byzantine). It should be noted that they were working before pottery chronology was well developed. Sellin and Watzinger correctly identified Early and Middle Bronze periods. The expedition concluded that Tell Sultan was abandoned during the Late Bronze Age period (1550-1200). The expedition published a preliminary report in 1913 (Jericho: *Die Ergebnisse der Ausgrabungen*) and Watzinger published his revised chronology in 1926 in a short article (*Zur Chronologie der Schichten von Jericho*).

3. The British expedition of Garstang between 1930 and 1936 by the University of Liverpool. Garstang was the first to use modern methods, although still crude by today's standards. He published a number of preliminary reports before World War II in the Palestine Exploration Fund Quarterly Statements, the University of Liverpool Annals of Archaeology and Anthropology and a popular account summarizing his final views after the war (1948). Garstang excavated several areas of the tell and neighboring tombs including a residential area on the southeast slope and a collapsed double wall on the summit of the tell. He labeled this level 'City IV' and dated it to the late 15th to 14th centuries (the Late Bronze Age). Based on pottery finds, scarabs from the nearby tombs and the absence of Mycenaean ceramics, he dated the violent fiery destruction of Level IV to around 1400 BC (Garstang 1927:96-100; 1930:123-125; 1932:149; 1933:3-42; 1935:143-184; 1936:67-76). A few years after his final publication, Garstang asked Kathleen Kenyon to review and update his material. Kenyon concluded that only a small area of the tell was occupied during the 14th century (Kenyon 1951:101-138) and agreed with Sellin and Watzinger that the destruction of Level IV occurred in the mid-16th century.
4. The British expedition of Kenyon between 1952 and 1958 by the University College of London. After reviewing Garstang's excavation, Kenyon launched her own excavation at Tell Sultan lasting six seasons. Kenyon introduced new stratigraphic excavation techniques using soil and debris layer analysis. She recorded in great detail the sides of each balk. Her preliminary reports and

post-mortem report are very detailed but lack analysis on how/why she came to her conclusions. She confirmed and expanded her earlier study of Garstang's reports that the double wall system that Garstang recorded as Late Bronze Age was from the Early Bronze Age and that the destruction of City IV was around 1550 as opposed to Garstang's 1400 date (Kenyon 1951:101-138; 1952:62-82; 1954:45-63; 1956:67-82; 1960:88-113. Kenyon died in 1978. Her detailed reports on the pottery from her excavations were partially published in 1982 and 1983 in a two-volume series (cf.; Kenyon & Holland 1982; 1983).

5. The Italian-Palestinian expedition: In 1997 an Italian expedition under the University La Sapienza in Rome led by Nigro in partnership with the Palestinian Department of Antiquities and Cultural Heritage led by Taha began digging at the site and continued to dig at the site in 2011. Although most of La Sapienza's preliminary reports on their past seven seasons are in Italian, an English summary of their findings can be found at <http://www.lasapienzatojericho.it/>. The expedition has expanded the dig areas of both Garstang and Kenyon and opened up new areas on the eastern and southern sides of the tell. A major new find was a Middle Bronze Age II lower city on the eastern and southern sides of the tell which included a spring within a fortified urban area. A large public building was discovered next to the wall by the spring. The building is assigned to Stratum IVc. A new 'princely burial with a relatively wealthy funerary assemblage' was discovered under the floor of this structure. The preliminary reports ascribe the burial pottery to period IVa (Middle Bronze Age I) (http://www.lasapienzatojericho.it/Results%201997-2000/res_sulIVc.htm).

The expedition also opened up and expanded the areas surveyed by Sellin, Garstang and Kenyon. They found the strata in the order described by Kenyon, confirming that the outer wall was a Middle Bronze Age II-III structure. The team has uncovered more of the Middle Bronze walls including several more towers and a gate structure. In regards to the outer wall of Stratum IVc (they date to Middle Bronze Age III [1650-1550 BC]) the team concluded that it was rebuilt and modified towards the beginning of this

period and violently destroyed at the end of 1550 or ‘some years later’ (http://www.lasapienzatojericho.it/Results%201997-2000/res_sulIVc.htm).

Table 4.5: The stratigraphy of the Garstang, Kenyon and Italian-Palestinian excavations (cf. Garstang 1948:128 and Nigro & Taha 2006a:1-35; <http://www.lasapienzatojericho.it>)

Garstang	Kenyon	Italian-Palestinian	Archaeological period	Chronology
First City	Early-Middle Bronze	Sultan IIId2	Early Bronze Age IVB	2200-2000
Second City	Middle Bronze I	Sultan IVa	Middle Bronze I (IIA)	2000-1800
Second City	Middle Bronze II	Sultan IVb	Middle Bronze II (IIB)	1800-1650
Third City	Middle Bronze II	Sultan IVc	Middle Bronze III (IIC)	1650-1550
Fourth City Late Bronze I No City Late Bronze II	Late Bronze (No city)	Sultan V	Late Bronze	1550-1200
No City Late Bronze II or Early Iron I Fifth City Early Iron II	Iron (small settlement)	Sultan VI	Iron	1200-535

The preliminary reports of this ongoing expedition hint at a number of finds that, when published, will shed further light on the pottery chronology of the Middle-Late Bronze Age debate. In the newly discovered Middle Bronze Age II lower city, the reports state that a large inventory of domestic items and pottery was recovered. Some of the material from Area B is listed as Iron Age. Although the preliminary reports state that no Late Bronze Age pottery has been found in these areas, Nigro makes reference to digging through Late Bronze II and Iron Age material from the Garstang and Kenyon dumps when expanding the excavation of the large public building of Area G of the lower city Strata IVb-c (Middle Bronze Age II-III) in the 2011 season (<http://www.lasapienzatojericho.it/Results2011/results2011.htm>). In referencing the Iron Age finds of area B and the lack of finds in neighboring areas G and F and on the summit of Spring Hill, Nigro again emphasizes the problem of analyzing this complex stratigraphy by pointing out that areas G, F and the summit of Spring Hill ‘experienced intensive razing of later periods that removed all strata

down to the Middle or even to the Early Bronze Age' (http://www.lasapienzatojericho.it/Results%201997-2000/res_sulV.htm). This same issue exists on the northern plateau of the tell where later strata (after the Middle Bronze Age) 'largely disappeared due to intense disturbing activities in the Byzantine periods' (http://www.lasapienzatojericho.it/Results%201997-2000/res_sulIV.htm). Kenyon reported on the same issue of disturbed or removed layers when she commented on the Iron Age II remains in her Trenches I-III saying that the Iron Age II terracing activity considerably eroded the tell into the Middle Bronze Age III rampart (Kenyon 1981:111-113).

Nigro and Taha summarize the strata of interest to this thesis in the following paragraphs:

Level IVc – Middle Bronze Age III (1650-1550) marked by a major transformation and expansion of the urban organization of the tell. The town was reduced in size and part of the southern Lower Town was razed for the construction of a massive stone rampart and sloping embankment (Nigro & Taha 2006a:34-35).

Sultan V-VI – Late Bronze and Iron Ages (1550-535 BC): A few materials and some tombs are known from period V, the Late Bronze Age, even though not a single pottery fragment from this period was found on the tell by the Italian-Palestinian Expedition. Iron Age materials were found in Area B58, while in Areas G and F on the summit of the Spring Hill and on the northern plateau, intensive razing of later periods had removed all strata down to the Middle or even to the Early Bronze Age (Nigro & Taha 2006a:35).

The only other comments on pottery by the Italian-Palestinian expedition relate to strata II – Khirbet Kerak and Abydos ware (Nigro 2006b:15-16) that demonstrate Jericho's Early Bronze Age trade network and 'a distinguished set' of Red Slip pottery from the strata VIc-Iron Age IIc strata (cf. <http://www.lasapienzatojericho.it/Results2011/results2011.htm>). All other references are general as a large amount of domestic pottery was found in the lower urban area.

On dating the violent and sudden destruction of level IVc, Nigro and Taha place it 'around 1550 or some years later' and say that

...there is no evidence for attributing this event to some enemy. But the intervention of a strong foreign power seems possible, since the city was so badly shattered that it was abandoned for various centuries and the inhabitants probably moved to another area in the Jericho Oasis (http://www.lasapienzatojericho.it/Results%201997-2000/ROSAPAT%2002_Middle%20Bronze%20&%20Later%20Periods.pdf page 35 accessed 3 December 2011) (cf. Nigro & Taha 2006b:1-40).

In each expedition's reports, the majority of reporting on Strata IV-V focuses on the walls, the broader fortification system and the lack of Late Bronze Age artifacts. The only clearly excavated area containing Late Bronze Age material is in the area of the 'Middle Building' (so named by Garstang as it is located below the Iron Age 'Hilani' building and above the Middle Bronze Age strata) on the southeastern side of the tell. Kenyon dated this structure and a nearby 'house' in her square H III to the 14th century. Kenyon explains the absence of this 14th century layer in neighboring squares by saying that the Iron Age deposits 'went right down to the deep gullies cutting into the Middle Bronze Age levels' (Bartlett 1982:98).

The controversy of Bronze Age chronology, pottery analysis and relating archaeological findings to textual accounts, has no better case study than Jericho. Each expedition has failed to publish their final reports in a timely manner when they were able to explain or elaborate on their conclusions (the ongoing Italian-Palestinian expedition exempted).

After Kenyon's pottery publications in the 1980s, Wood contradicted Kenyon's conclusion of a sparse Late Bronze Age occupation. Analyzing the pottery reports of Garstang and Kenyon, Wood studied the local domestic pottery repertoire. Wood identified 3 main types of ceramic ware that are indicative of the Late Bronze Age:

1. Cooking pots with an internal lip (found only in the Late Bronze Age I period (Amiran 1969:135).
2. Simple round-sided bowls with concentric circles painted on the inside (generally confined to the latter half of Late Bronze Age I). Parallels of this type have been found at Ashdod stratum XVII and Hazor stratum II and identified as Late Bronze Age I ware by Dothan 1971:81 and Yadin 1972:32].
3. Flaring carinated (angled) bowls with a slight crimp, conical bowls, store jars with a simple folded rim, inverted rim cooking pots with flange, water jars

with painted stripes and small dipper juglets, which are all characteristic of the Late Bronze Age (Wood 1990 <http://www.biblearchaeology.org/post/2008/05/did-the-israelites-conquer-jericho-a-new-look-at-the-archaeological-evidence.aspx#Article> accessed 10 December 2011) that are normally indicative of the Late Bronze Age.

Wood also examined Garstang's pottery collection at the University of Liverpool and identified a number of Cypriot Bichrome pieces which are also indicative of the Late Bronze Age. In the 1930s, the significance of Cypriot Bichrome ware was not recognized and Garstang did not single it out from the other ceramic ware for his chronology. It was a lack of any imported Cypriot Bichrome ware in the two 8 x 8 meter squares of Kenyon's excavations that helped her conclude that no Late Bronze Age occupation was present (cf. Wood 1990). Later testing of several examples of this Bichrome ware determined they were of local manufacture (Provan, Long & Longman 2003:175) but they still demonstrate occupation during the Late Bronze Age.

Wood presents three other arguments to support a Late Bronze Age I occupation and a return to a City IV destruction at the end of the 15th century:

1. The Egyptian scarab sequence found in neighboring tombs which include three XVIII Dynasty Pharaohs, one of Hatshepsut (1479-1457), one of Thutmose III (1457-1427/25) and two of Amenhotep III (1390-1352).
2. Carbon-14 samples from charcoal dated to 1410 plus or minus 40 years.⁵⁸
3. The crowded stratigraphy layer of City IV (Middle Bronze III). Kenyon identified 20 different architectural phases with three major and 12 minor destruction layers. Wood contends this is too much activity for only the Middle Bronze Age III (1800-1550) and that extending the final strata into the Late Bronze Age is more reasonable.

⁵⁸ C¹⁴ dating debates for Jericho have a number of controversies inherent in the range and samples of C¹⁴ analysis in general and the current debate on adjustment to the Thera volcanic eruption date and its effect on chronological dating across the Levant. For a general introduction to the C¹⁴ issues surrounding Jericho see http://conservapedia.com/Jericho_chronology_dispute accessed 8 July 2011.

Bienkowski makes counter-arguments to Wood's three arguments. He points out that the scarabs all came from tombs used throughout the Middle Bronze Age to Late Bronze Age II and that scarabs could remain in circulation (or even be made) for long periods after the Pharaoh's death. The Carbon-14 samples he dismisses as being contaminated and intruded on by different archaeological activity. The crowded stratigraphy argument he rejects by correctly stating that there are no exact measurements in subdividing the Middle Bronze Age II and III divisions (cf. Bienkowski 1990:45-46; 69).

As Bienkowski argues that there are no clear distinctions between Middle Bronze Age sub-divisions. Level IVb (Middle Bronze Age II) appears to be widely accepted as paralleling the Hyksos period in Egypt due to the large number of Hyksos scarabs and other Egyptian artifacts attesting to strong links with Egypt during the 13th-15th Dynasties.⁵⁹ Level IVc does not have any Hyksos material therefore the destruction layer separating Level IVb and Level IVc should parallel the Hyksos/Dynasty XVIII transition which is one of the main markers for separating the Middle and Late Bronze Ages in the southern Levant. There is also little discussion on the 'Middle Bronze fortifications being reutilized by the Late Bronze Age as at many other Late Bronze Age sites' (Mazar 1990:331).⁶⁰

It is this author's opinion that the argument for the total abandonment of Jericho in the 16th century should be less dogmatic for at least three reasons: the growing body of Cypriot and domestic ceramic ware of the Late Bronze Age (or at least Middle-Late Bronze Age transition) at Jericho, the complexities of assigning specific

⁵⁹ Both Garstang and Nigro (without Kenyon's objections) agree with dating of these strata (Garstang 1932, 43-54; Nigro & Taha 2006b:33).

⁶⁰ Further study on the use of Early and Middle Bronze Age walls and fortification systems would be profitable for this issue. At other Jordan Valley sites, the massive fortification systems of earlier periods were incorporated into Late Bronze and Iron Age defensive structures. Abu Kharaz appears to have used, at least in part, Middle Bronze Age fortifications during the Late Bronze Age (section 4.2.1.4). Preliminary reports from Tell Hammam (section 4.2.3.2) have the Iron Age walls utilizing elements of the Middle Bronze Age fortification systems. Is there a pattern of evidence that large Middle Bronze Age fortifications consistently remained in use (beyond foundation level) in later periods? If so, what would the implications be for the Jericho destruction debate?

dates to strata using ceramics and artifacts that carry through the Middle Bronze and Late Bronze Age transition periods and the earlier mentioned observations of Kenyon and Negro of the Iron Age and Byzantine occupations eroding or razing parts of the tell to the Middle Bronze Age level.⁶¹ Therefore material and comments gathered from various Jericho reports that include Levels IVc, V as well as other site reports that refer to Jericho material spanning Middle/Late Bronze Age transition through the Late Bronze/Iron Age transitions will be used to infer possible points of connections.

⁶¹ None of the primary excavators argue a case for the abandonment of the site during the Late Bronze Age. A smaller occupation level than the previous Middle Bronze Age settlement, most certainly, but the controversy over reconciling the literary account of Joshua and the walls has pushed proponents from both sides of the argument to extremes. In popular literature on this debate, Kenyon is often depicted as denying a Late Bronze Age occupation entirely and any acceptance of the Biblical account, when in fact she is only describing her dating of the known fortification system to the Middle Bronze Age. In regards to the Late Bronze Age city and Biblical account she wrote,

Above these [the burnt material of city IV] are scanty traces which are all that survive of the town of the Late Bronze Age. All the rest of the houses of this period, and indeed most of those of the Middle Bronze Age, except in the area in question, has have been washed away, or destroyed by men quarrying for mud bricks during the centuries in which the site has not been occupied. The town of the Late Bronze Age must have been that which was captured by the Israelites under Joshua, for the literary and other evidence points to a date between about 1400 B.C. and 1260 B.C. for the entry of the Israelites into Palestine. Unfortunately the denudation which the Tell has suffered has removed all traces of walls which can be dated to that period. Pottery from the scanty areas of the Late Bronze Age town which do survive, suggest that it came to an end about the middle of the fourteenth century B.C., and this may be the date of its destruction by the Israelites (Kenyon 19[sic]:7).

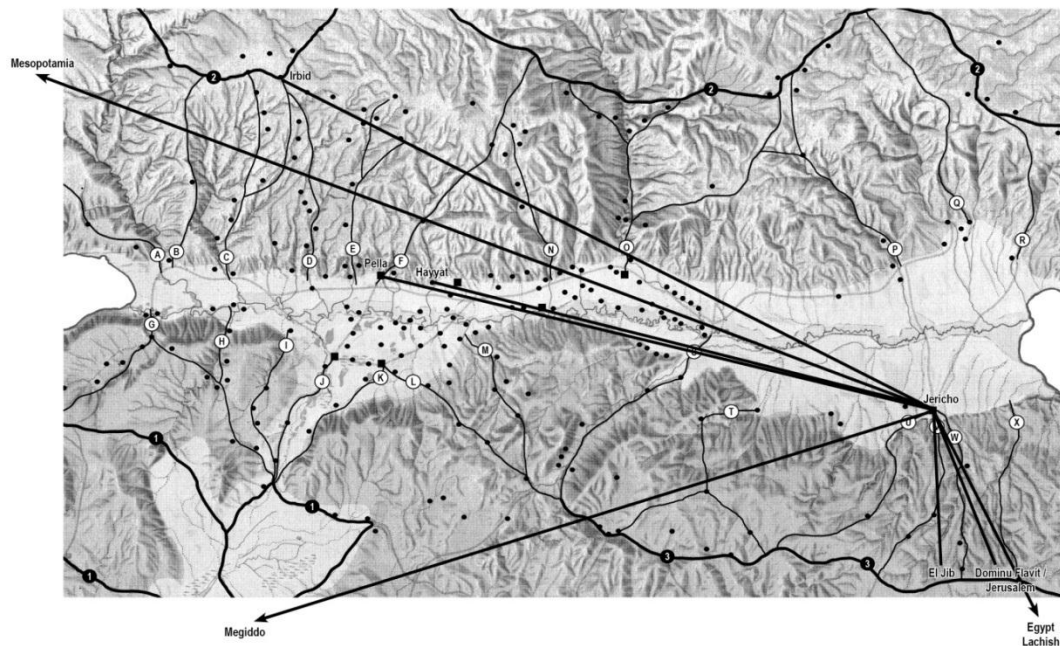


Figure 4.19: Jericho connection points

The primary artifactual parallels of Jericho come from the Middle Bronze – Late Bronze Age transition and the early part of the Late Bronze Age. A growing body of Late Bronze Age ceramics is being identified but no parallels have been published (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

International points of connection for Jericho:

- Mesopotamia: In one of the Spring Hill towers, a clay lioness figurine was found in a Middle Bronze Age II destruction layer that closely parallels a Mesopotamian terracotta figurine from Dur-Kurigalzu (http://www.lasapienzatojericho.it/Results%201997-2000/ROSAPAT%2002_Middle%20Bronze%20&%20Later%20Periods.pdf page 30 accessed 12 December 2011). This artifact is ascribed to Level IVB which is outside the transitional zone of this thesis. It is included here because it supports the textual evidence of Mesopotamian trade found in Joshua 7:21 where a cloak from Shinar is mentioned (Section 3.3.4);
- Aegean (via the port at Abu Hawam): Late Mycenaean pottery from Tomb 13 (Garstang 1948:127);
- Egypt: Scarabs of Pharaoh Hatshepsut (1479-1457, Thutmose III (1457-1427/25) found in Tomb 5 and Amenhotep III (1390-1352) found on the tell;
- Broad cuneiform writing world: A cuneiform tablet found by Garstang next to the 'Middle Building' (City V) in the strata between the Iron Age house and

the Middle Bronze Age (IVc) strata. The inscription is severely damaged by fire and unreadable (Garstang 1948:122). That cuneiform records and correspondence were being kept connects Jericho, not only to Pella where two similarly damaged tablets were discovered, but to the larger international arena.

Regional points of connection for Jericho:

- Irbid: Biconical jug recorded by Garstang in Tombs 5 and 13 of Jericho are dated by him to the 15th century (Garstang 1933). Later studies have lowered the date to the 14th century (Oren 1973:6) because they are similar in style to Tombs in Irbid (Dajani 1964:101) (Dajani dates the jugs to 1350-1100 but all the other material from the Irbid deposit are 14th century at the latest).
- Tell Far'ah (north), Jerusalem area, Megiddo and Lachish: Other examples of biconical jugs recorded by Garstang in Tombs 5 and 13 are from Tell Far'ah Tombs I, II, and XII (De Vaux 1947:577), Dominus Flevit Tomb (Saller 1964), Jerusalem Tomb (Amiran 1960), el-Jib Tombs 10A-B (Pritchard 1963), Megiddo Tomb 78 and Lachish Structure III (Tufnell 1940) and all are in a Late Bronze Age I or II context.

Local point of connection for Jericho:

- Jericho ended the Hyksos period (City IVb) with a major destruction layer. City IVc used the remaining fortifications system and even expanded it until meeting a fiery destruction. Few remains of Level V have been discovered leaving the impression that Jericho Level V was a small settlement and the tell 'abandoned' for other parts of the oasis. Level VI shows a growing settlement that is identified with the Iron Age. There is much debate over the dating of City IVc. Was it destroyed in the Middle Bronze Age around 1550 or did it extend into the 15th century, possibly as late as 1400. Admittedly both Garstang and Kenyon's main dig squares were in a poor domestic area of the city. Although the dates are not clear, the picture Jericho gives of the western

side of the Southern Jordan Valley is of a large internationally connected city of the Middle Bronze Age dramatically falling into obscurity sometime during the first part of the Late Bronze Age before a time of renewed settlement transitioning into Iron Age II. This situation led Kenyon to describe Jericho as a 'backwater' during the Late Bronze Age (Kenyon 1967:271), cut off from the growing international trade of the coast and northern part of the valley. Although we eagerly await publications of the 'palace' area and the rich tomb being excavated by the Italian-Palestinian expedition, the current archaeological picture of Jericho is clearly reflected in the poorer, isolated and 'cut off' landscape revealed in Chapter 2.

The connection points for Jericho are not representative for the whole Late Bronze Age as practically all the Jericho connections come from Garstang's Tomb 13 which falls in the Middle Bronze/Late Bronze Age transition.

The site has been disturbed through its 10,000 years of occupation, each occupation affecting the remains of the previous. In modern times, the site has been affected by the local population extracting some of the huge Middle Bronze Age III blocks for building and excavating soil for nearby agricultural fields and the foundations of modern buildings

(<http://www.lasapienzatojericho.it/Results2011/results2011.ht>).

4.2.3.2 Tell el-Hammam



Figure 4.20: Tell Hammam from the east looking west
Dead Sea on the top left side, Jericho in the far center. Photo taken from
http://www.tallhammam.com/uploads/COLLINS_ASOR_2009.pdf 11 December 2011.

Tell el-Hammam is located in the Southern Jordan Valley at the base of the escarpment along the Wadi Kafrein, only 14 kilometers northeast of the Dead Sea. The site has been excavated by Trinity Southwest University and the Jordanian Department of Antiquities under the direction of Collins since 2005. The seventh season is scheduled for early 2012. Tell Hammam is the largest site on the Plains of Moab covering almost a square kilometer. Excavations have revealed Chalcolithic to Middle Bronze Age, Iron Age II and later strata. The main focus of the excavations has been on the Middle Bronze Age levels. Early Bronze Age strata have revealed a six meter thick city wall surrounding the elliptical tell in a 500 x 750 meter area. These early fortifications were reused and expanded in the Middle Bronze Age II to include a 50 meter deep defensive perimeter (when you include the city wall, outer rampart and stabilizing walls) in places. On the top of the tell are Iron Age II strata which include a 3 meter thick city wall and chambered gateway (<http://www.tallelhammam.com/> accessed 8 October 2011). In season five, a large 100 x 100 meter raised platform was identified in the banana field just east of the tell. The top 50 centimeters was heavily disturbed by agricultural plowing but the remaining material appears to be a Middle Bronze I and II public area or possible sanctuary (Collins 2010:13-14).

Although some Late Bronze Age ceramics have been found on the site, they are rare and no Late Bronze Age architecture has been revealed yet (Falconer 2007:19; 2009:5; Falconer & Redman 2009:5). The only Late Bronze Age material not found on the surface has been at two tombs in the adjacent doleman fields. The surrounding hills adjacent to the tell contain doleman fields and 'possibly hundreds of tombs' (Collins 2010:9). In season five, the excavations began to map the doleman fields. During the survey, the team found a recently robbed tomb (HT.55), with Chalcolithic, Early Bronze Age, Middle Bronze Age II, and Late Bronze Age II pottery still in the night diggers' debris pile. In profiling the contents of the tomb, Collins identified more Late Bronze Age IIA and possibly Iron Age I ceramics (Collins 2010:9, 15).

Currently, no Late Bronze Age strata have been found for the Late Bronze Age or Iron Age I periods. With the size of the tell and the limited excavation areas, it may be too early to pronounce the site as abandoned during the Late Bronze and Iron Age I

periods. However, some excavation squares that have penetrated both Iron Age II to the Middle Bronze Age strata have found the Iron Age II walls built directly on the Early Bronze/Middle Bronze Age foundations (Collins 2007:14) (cf. Collins 2007; 2009; 2010).

4.2.3.3 Tell Kafrein

Tell Kafrein is two kilometers from Tell Hammam (less than a twenty minute walk from tell top to tell top).⁶² The site of Tell Kafrein (locally known as Tell Shirup) is one kilometer north of Wadi Kafrein on a 35 meter high tell (much of it part of a natural rock outcrop). A recent survey has revealed ceramics from Early Bronze to Hellenistic. The site was excavated by the University of Ioannina, Greece, under Papadopoulos. Excavations were in 2002-2005. Nothing has yet been published by Papadopoulos but an interview by V. Angelikopoulos reports Papadopoulos as saying,

We uncovered walls of houses and movable objects such as pots. At first glance, it appears that most of the findings date from the late Bronze to the Iron Age (1300-800 BC). This is particularly interesting for myself, as a specialist in Cretan and Minoan culture, as I hope we will find objects from that culture. Already, to the north, a temple with Egyptian, Cypriot and other, perhaps Minoan, objects have been found. In any case, Tell Kafrein is a very important site and I believe that we will harvest a large number of finds there.

(http://archive.ekathimerini.com/4Dcgi/4Dcgi/_w_articles_ell_11_26/02/2003_26894 accessed 12 December 2011).

This must be a misquote or Papadopoulos was referring to first impressions from an earlier visit. For Collins, in his Tell Hammam reports, refers to conversations with Papadopoulos confirming that Tell Kafrein's strata reflected those from Tell Hammam with Early Bronze-Middle Bronze Age A and Iron Age periods and that no Late Bronze Age strata had been found (Collins 2009:5). Tell Kafrein has a large cemetery that appears to be primarily Early Bronze Age. Collins suggests that this cemetery served Tell Hammam in the Early Bronze and possibly Middle Bronze Ages as well (Collins 2009:5) (cf.

⁶² Author's personal experience

http://archive.ekathimerini.com/4Dcgi/4Dcgi/_w_articles_ell_11_26/02/2003_26894

Accessed Feb 26, 2011; Collins 2009).

4.2.3.4 Tell Iktanu

Tell Iktanu is located just south of the Wadi Hisban, six kilometers from Tell Hammam. Excavations were directed by Prag in 1966 on behalf of the British School of Archaeology in Jerusalem and in 1987, 1989 and 1990 on behalf of the British Institute at Amman for Archaeology and History. Excavations focusing on the north side of the tell have uncovered Early Bronze-Middle Bronze Age levels. Late Bronze Age ceramics have been found but no clear Late Bronze Age stratum has been identified (<http://www.cbri.org.uk/shuaib.html> accessed 11 November 2011).

4.2.3.5 Tell Nimrin

Tells Nimrin, Mustah and Bleibel are so close together that Glueck thought they should occupationally be considered as one site. A rescue excavation ran at Tell Nimrin from 1989 to 1996. The excavation team was made up of Case Western University, Willamette University and the University of Jordan. The first two seasons (1989-1990) found Early Bronze Age IV and Middle Bronze Age I strata. Large Middle Bronze Age walls, a fortification system and monumental buildings were identified (Flanagan, McCreery & Yassine 1993:207, 218). The Middle Bronze Age occupation appears to have ended abruptly in the early 15th century BC with no clear evidence for a violent destruction (Flanagan, McCreery & Yassine 1994:219).

Tells Hammam, Kafrein, Iktanu and Nimrin have not revealed any Late Bronze Age strata and therefore give no data for making connections. Late Bronze Age pottery sherds have been identified at the sites but not analyzed any further. The size of Tell Hamman, in reference to the other mentioned sites and several smaller ones, appears to make a city-state cluster, with one central main site and surrounding satellite sites (Collins 2007:5). This cluster has escaped inclusion into earlier studies on Middle Bronze city-states simply because excavations at these sites are so recent (Collins 2009:24). This cluster of sites on the 'Plains of Moab' is proving to release a tremendous amount of new material for the Middle Bronze Age. The lack of any established Late Bronze Age or Iron Age I settlement is puzzling especially in view of

the major Middle Bronze Age occupation, key water supplies, rich alluvial pans and regional transportation routes. Currently, the ceramics and stratigraphy of all the sites show a consistent Early Bronze Age, Middle Bronze Age and Iron Age II occupation with a gap for the Late Bronze and Iron I Age periods (Collins 2010:5). This Late Bronze/Iron Age I gap appears to be an isolated event. The Madaba Plains to the east and the Zerqa Triangle to the north each show a Late Bronze Age urban presence. Jericho's Late Bronze Age presence fifteen kilometers to the west is also debatable, but Jericho's debate is more about the size of the occupation rather than the question of whether there was an occupation (see next section).

The excavations of the southern section of the Jordan Valley, with the exception of the Middle Bronze/Late Bronze Age transition stratum of Jericho, have no Late Bronze Age stratum in which to draw artifactual parallels. This lack of Late Bronze Age occupation evidence is in stark contrast to the north and central sections therefore, concluding that the southern section was a separate isolated section from the north and central sections.

4.2.4 Excavations in the eastern highlands

Glueck's 1940a and 1970 hypothesis that the eastern plateau of Transjordan was only sparsely inhabited with just a few large settlements during the Late Bronze Age has certainly fallen to the wayside as more and more Late Bronze Age sites are not only being identified but excavations are showing them to be large urban centers with regional connections.

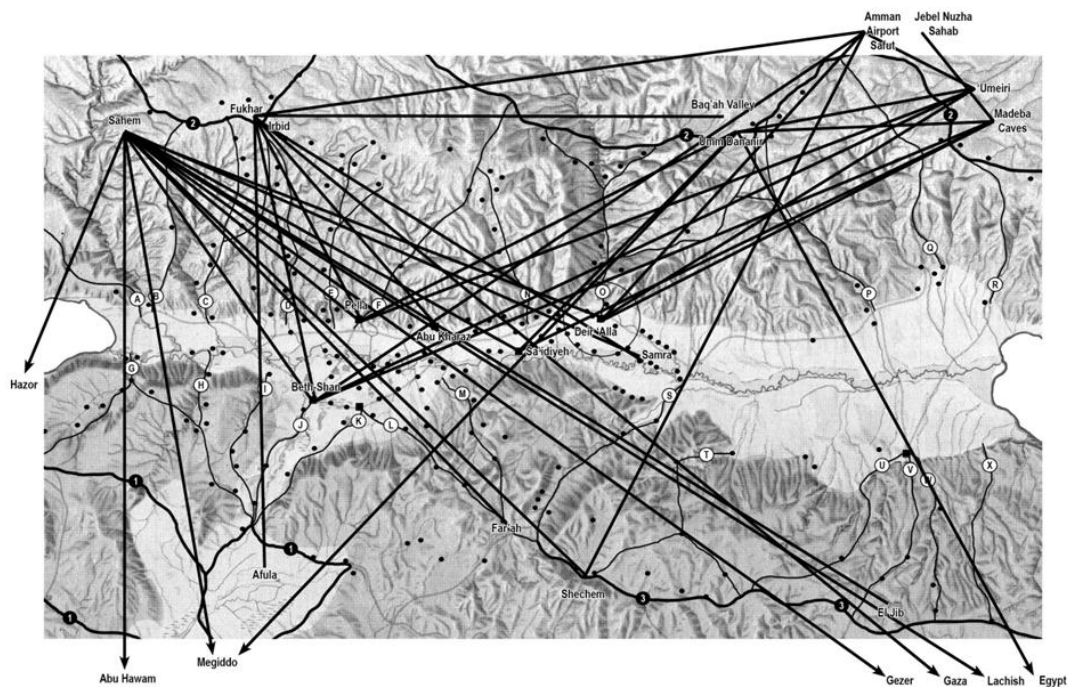


Figure 4.21: The eastern highland connections

The eastern highland connections points originating from the Sahem Tomb, Tells Fahkar, Irbid, Umm Dananier, the Baq'ah Valley sites, Amman Region and Madaba Plateau. The underlying map shows the main routes into the Jordan Valley (marked A-X) that were inferred in section 2.3.2.2. (Safut is misplaced and should be at the first point southwest on the diagonal line towards Umm Dananir and not with the Amman Airport building site) (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

4.2.4.1 Sahem Tomb

The Sahem Tomb is located ten kilometers northwest of Quweibeh (Abila of the Decapolis, no. 110 on Figure 2.37) in northern Jordan along a tributary of the Yarmuk River. This Late Bronze Age tomb was discovered and partially bulldozed during the construction of an elementary school in the Jordanian town of Sahem. This large rich tomb is probably part of a larger cemetery which lies under the modern village. A rescue excavation was conducted by Fischer in 1992.

Over 200 items of ceramic, stone and metal (bronze, silver and gold) were recovered. They included a large repertoire of pottery, clay figures, scarabs, jewellery and weapons that ranged from Late Bronze Age IB, IIA, IIB and transitioning into the Iron Age:

The goods [in the Sahem tomb] reflect the life of a prosperous society, whose wealth was based on agriculture. The evidence of trade with Egypt, the Mycenaean world and Syria is indicated. Religious activities and burial customs are mirrored by two figurines depicting the syncretism of the

Egyptian goddess, Hathor, and the Canaanite goddesses Ashera/Astarte/Anat. There is also an unusual figurine of limestone which once had a wig.

The objects are both locally made, including imitations of clay objects of foreign origin, e.g. from the Mycenaean culture, and imports which came mainly from Egypt (Sahem http://www.fischerarchaeology.se/?page_id=13 accessed 10 October 2011).

The tomb material parallels and reflects strong connections with the surrounding Late Bronze Age cities of the Transjordan Plateau including Irbid, Husn, the Baq'ah Valley (Fischer spells it El-Buq'a in his reports), Sahab, Jebal Nuzha (Amman) and Madaba (Fischer 1997:28, 30, 31, 36-41). There are even more parallels with material that suggests intensive ties with cities in the Jordan Valley as well as with the western highlands and international trade further east.

Points of connection for the Sahem Tomb in the Jordan Valley:

- Tell Abu Kharaz: Small rounded bowls, two-handled biconical jugs of types 4686, 4678, 4727, 4728 and multiple types of beads, pendants and buttons (Fischer 1997:28, 33, 38, 39, 66-69);
- Pella: A chalice with carinate and ridged rim (Van der Steen 2004:122; Fischer 1997:Figure 7);
- Tell Dar 'Alla: Small rounded bowls of types 4739, 4741 4679, 4680, 4678, 4740 (Fischer 1997:30, 33, 34);
- Beth-shan: Small rounded bowls of types 4679, 4727, 4728, two-handled biconical jugs (the imitation bilbil style similar to those found around Amman and the Madaba Plateau), multiple types of beads, pendants and buttons as well as several types of bronze daggers (Fischer 1997:30, 38, 39, 66-71);
- Tabqat Fail (Pella): Small rounded bowls of types 4743, 4678 (Fischer 1997:31, 33).
- Tell Sa'idiyeh Beads: Pendants and buttons (Fischer 1997:66-69);
- Kataret Samra: Two-handled biconical jugs of types 4727 and 4728 (Fischer 1997:38, 39);
- Northern Jordan Valley: A number of the plain two-handled jugs are classified as Chocolate-on-White ware but without the classic finish (Fischer 1997:39).

Points of connection for the Sahem Tomb through the Jordan Valley:

- Egypt: Two Egyptian scarabs dated to the Late Bronze Age IA (Fischer 1997:19). A number of XII and XV Dynasty scarabs were also found within the same Late Bronze context. Also in the tomb was one carnelian scarab before the IXX Dynasty which is very rare in the southern Levant. Five other examples are known in Palestine. The others were all found in a late Middle Bronze context at Tell Sultan (Jericho), Beth-shan and Lachish (Fischer 1997:79). A gold-mounted blue scarab ring with a rare coronation scene of Ramesses II in a Late Bronze Age IIB context (Fischer 1997:20).
- Western highlands
 - Tell Balata (Shechem): Small rounded bowls of type 4686 (Fischer 1997:28).
 - El-Jib (Gibeon): Small rounded bowls of type 4686 and multiple types of beads, pendants and buttons (Fischer 1997:28, 66-69).
 - Fischer suggests that the 'two clay plaques and a stone figurine depicting female goddesses were very likely imported from Cisjordan' (Fischer 1997:89). The figures represent a blending of the Egyptian goddess Hathor and a Canaanite deity;
- Coastal Plain
 - Tell Gezer: Small rounded bowls of types 4682, 4679, 4681 (Fischer 1997:29-32).
 - Tell Duwer (Lachish): Small rounded bowls of types 4681, 4682, 4679, 4732, 4736 and jugs and multiple types of beads, pendants and buttons, as well as several types of bronze daggers (Fischer 1997:29-32, 37, 66-71).
 - Tell Far'a: Bowls with low carination and high ring bases of type 4678 as well as several types of bronze daggers (Fischer 1997:3, 69-71).
 - Megiddo: Small rounded bowls of types 4679, 4680, 4740, multiple types of beads, pendants and buttons and as well as several types of bronze daggers (Fischer 1997:30, 34, 66-71).

- Abu Huwam: Multiple types of beads, pendants and buttons (Fischer 1997:66);
- North of the Sea of Galilee: Hazor: Small rounded bowls of type 4686, 474, 47421 and multiple types of beads, pendants and buttons (Fischer 1997:28, 34, 35, 66-69);
- Aegean (via the port at Abu Hawam): Three of the five daggers are similar to examples found in Cyprus, Greece as well as Megiddo and Lachish in regards to material and shape (Fischer 1997:71). There was no imported Mycenaean and Cypriot pottery alongside the other imported goods although 21 of the total of 78 ceramic vessels are classified as Mycenaean imitations (Fischer 1997:86).



Figure 4.22: Samples of the Sahem Tomb pottery and bronze daggers
(http://www.fischerarchaeology.se/?page_id=13 accessed 14 October 2011)



Figure 4.23: Three figurines from the Sahem Tomb
The two on the left show a syncretism between the Egyptian goddess, Hathor and a Canaanite goddess
(http://www.fischerarchaeology.se/?page_id=13 accessed 14 October 2011).

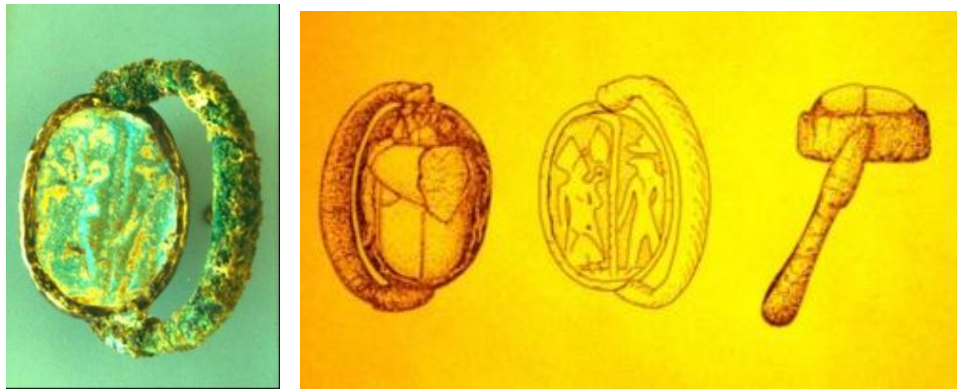


Figure 4.24: Gold ring of Ramesses II (1279-1213) from the Sahem Tomb
(http://www.fischerarchaeology.se/?page_id=13 accessed 14 October 2011)



Figure 4.25: Two of the Middle Bronze scarabs from the Sahem Tomb
(http://www.fischerarchaeology.se/?page_id=13 accessed 14 October 2011)

The Sahem tomb shows a broad network of trade along established communication routes; north-south along the Kings' Highway to the Madaba Plateau, down into the Jordan Valley (probably along routes B and D [see 2.3.2.2]) and then spreading north to Hazor and south to the Central Jordan Valley. The Egyptian artifacts and other parallels with the Jezreel and Coastal Plain clearly trace a path along the major coastal highway.

4.2.4.2 Tell Fukhar and the Irbid Plateau

Tell Fukhar is located on the eastern side of Wadi Shellala, 11 kilometers northeast of Irbid, on the ancient road that connected the Jordan Valley with the fertile Irbid Plateau. Tell Fukhar is not known from any ancient sources but is a possible candidate for Zarqu (EA 256), identified as being between Pella and Ashtaroth (McGovern 1997:399). Excavations at the site have revealed occupation levels of the Early Bronze, Middle Bronze Age IIA, all of the Late Bronze Age through to the

Persian periods. It was first surveyed by a German team and partially excavated by a Scandinavian team led by Ottosson and Strange between 1990 and 1993. The Germans recorded a large amount of Late Bronze Age pottery and a mold for making a fertility goddess figurine as well as a separate fertility goddess figurine of another type. The figurine and the mold were in a traditional north Mesopotamian style. The Scandinavian team uncovered a massive fortification wall and a large monumental building (over 25 meters long that was probably at least two stories high, based on the fallen debris of its destruction layer) constructed in the Late Bronze Age IIB period around 1300 and destroyed around 1200 in a large fire. In the stone pavement alongside the building, a scarab dated to the Ramesside period was found. Another figurine possibly representing the Egyptian god Hathor was also found. McGovern dated this figure to the 16th or 15th century and said that it was typical of mass-produced northern Mesopotamian characteristics (McGovern 1997:421-425; Strange 1997:399-405).

The Late Bronze Age I and IB- IIB periods reveal extensive trade with the Jordan Valley and westward. Three of the Chocolate-on-White pottery pieces dating to the Late Bronze Age IA had the same neutron activation and chemical profiles as examples analyzed from Beth-shan, Tell Abu Kharaz, Pella, Qataret es-Samra (near Deir 'Alla), the Amman Citadel and the Baq'ah Valley. These pieces clearly show that there was a triangle of trade between the Irbid Plateau, the Northern Jordan Valley and the Amman Plateau. Other ceramic samples have parallels with those found at Beth-shan and Hazor. Several artifacts represented trade that had passed through the Jordan Valley. Neutron activation analysis also revealed that a cooking pot in the Late Bronze Age II level was imported from the Gaza area and another jar originated from the Afula region in the Jezreel valley. Examples of Mycenaean IIB vessels (three are from the Mycenae region in mainland Greece, the other two are of uncertain origin) and Cypriot White Slip II ware were also well represented (cf. McGovern 1997:421-425; Strange 1997:399-405).

Points of connection for Tell Fuhkar and the Irbid Plateau in the Jordan Valley:

- Northern Jordan Valley: Chocolate-on-White ware with same clay analysis as Beit-Shan, Tell Abu Kharaz, Pella, Kataret Samra, Amman Citadel and Baq'ah Valley sites. (McGovern 1997:421, 424);
- Beth-shan: Parallels especially handleless collared-rim jars with rope applique that were over one meter in height and several molded glass pieces (McGovern 1997:421,424-425);
- Sa'idiyeh: Tubb in a personal communication with the excavators of Tell Fukhar concludes there are a number of parallels between the ceramics from the Late Bronze Age/Iron Age I transition strata with Tell Sa'idiyeh Stratum XII (Tubb 1998:101).

Points of connection for Tell Fukhar and the Irbid Plateau through the Jordan Valley:

- Hazor: Various ceramic parallels especially handleless collared-rim jars with rope applique that were over one meter in height (McGovern 1997:421);
- Gaza: Cooking pot with clay originating from around Gaza. Most of the non-local pottery at Tell Fukar from the Middle Bronze IIA period through the Iron Age I period came from the southern coast of Palestine between Gaza and Ashkelon (according to clay analysis) (McGovern 1997:421-424);
- Afula: Cooking pot with clay originating from Affuleh area (McGovern 1997:421);
- Aegean (via the port at Abu Hawam): Mycenaean IIB vessels and Cypriot White Slip II (McGovern 1997:421, 422).

Tell Fukhar appears to have been a major Late Bronze Age fortified site, well integrated into the regional and international trade routes. Within a 17 kilometer radius of Tell Fukhar are a number of other sites. The larger sites, Irbid, Husn, Ramtha and Deraa are also identified as having considerable Late Bronze Age occupation (cf. Strange 2000:476-481). It can be assumed that the other nearby sites of the Irbid Plateau had similar connection points in and through the Jordan Valley as did Tell Fukhar.

4.2.4.3 The Baq'ah Valley and Khirbet Umm Dananir

The Baq'ah Valley is a bowl shaped valley 10 x 5 kilometers in size and located 15 kilometers northwest of Amman. On the west side, Wadi Umm Dananir descends to the Jordan Valley after joining the Wadi Zerqa. The valley has rich *terra rosa* soil for agricultural growth along with a number of perennial springs. The King's Highway, running between Amman and Jerash, probably ran through this valley. At the beginning of the Wadi Dananir is a large Late Bronze Age site (Khirbe Um Dananir) with two cemeteries (Jebel Qesir and Jebel Hawaya). Two satellite sites are within a kilometer (Rumim Um Dananir and Rum Henu East) of it. All five sites will be treated together (cf. Homes-Fredericq & Hennessy 1989a:26-43).

McGovern of the University of Pennsylvania directed expeditions in the Baq'ah in 1977, 1978, 1980, 1981 and 1987. Excavations of dense Late Bronze Age occupation in the Umm Dananir region refute Glueck's 1940a and 1970 hypothesis that the region was inhabited only by nomads except for a few large settlements in this period. Since the Baq'ah Valley and Madaba Plains surveys of the late 1970s to the present have been done, it now appears that a number of settlements (of various sizes) were present from the Baq'ah to Madaba (cf. Homes-Fredericq & Hennessy 1989a:26-43).

Khirbet Umm Dananir is the largest site in the region, situated on the main road leading down into the Ba'qah from the Amman Plateau, on the hill of Jebel al-Qesir, near the largest spring in the region. The site is located at the beginning of the Wadi Umm Dananir which leads into the Wadi Zerqa. Excavations uncovered a pit with Late Bronze Age II pottery and bone material. The pottery was domestic in character, but excavators saw a cultic function for the site, based on parallels with pits in Palestine 'which are very often in the vicinity of cultic installations' (McGovern 1986:63). At Jebel Hawaya, a building was found which, according to the excavator, shows a strong resemblance to the building at the Amman Airport site, in layout and architecture. It had a central space with small rooms around and walls of over a meter wide. In the center of the central space was a heavy stone pillar and opposite it, against the back wall, a square block which may have been an altar. Most of the

foundation deposits were found in the trenches. The pottery is dated to Late Bronze Age IB-IIA. The site was destroyed in the Late Bronze Age IIB. No domestic remains were found at this building but pottery as well as animal and plant remains point to a sedentary society (McGovern 1986:130). Ceramics in the Jebel Hawaya building consisted of Egyptian scarabs and cylinder seals, Mycenaean and Cypriot pottery, as well as antique Minoan and Egyptian vases (Homes-Fredericq & Hennessy 1989a:35). Close to the site several burial caves were found and excavated – Caves A2, A4 and B3 and the biggest collections of Late Bronze Age material.

In Cave B3 near the site, pottery identical to that of Khirbet Umm Dananir was found. This was the only exclusively Late Bronze Age II pottery cache. There were two layers of burials, with a minimum of 64 individuals, men and women of all ages. Three individuals lay around a Bichrome painted bowl. Another individual was burned. There were also a number of burial gifts as well as the remains of fish and wheat (Van der Steen 2004:40-4). Finds included 4 scarabs, an Egyptian signet ring, 4 cylinder seals and 75 glass beads. The burial assemblage was similar to that of urban communities elsewhere in Palestine (e.g. Tomb 1145 at Megiddo and Tomb 1 at Pella) testifying to a sedentary lifestyle and well-developed trade connections (Homes-Fredericq & Hennessy 1989a:33). The pottery from the site consisted primarily of local pieces made from clay deposits from the Wadi Dananir. The next largest group of pottery came from the area around Deir 'Alla. The earlier pieces show parallels with Tell Hammeh and the later pieces parallel with Deir 'Alla Late Bronze Age Phase E (Van der Steen 2004:120). Several imported pieces were found including four Mycenaean IIIB/IIIA vessels, two stirrup jars from central Mainland Greece (according to their chemical profiles), and a Cypriot White Slip II 'milk bowl' (cf. Homes-Fredericq & Hennessy 1989a:33-35).

Points of connection for the Baq'ah Valley in the Jordan Valley:

- Deir 'Alla and the neighboring sites of Tells Hammeh, Rikabi, Ammata, Ghazaleh, Zakari and Bashir: The cave sites of Umm Dananir have many one to four piece parallels with various sites in the Zerqa Triangle (Van der Steen 2004:170-173, 178, 181, 184-185);

- Pella: Ceramics of Caves A2 and B3 with burial assemblage of Pella Tomb 1 (cf. Homes-Fredericq & Hennessy 1989a:33). Iron jewellery (McGovern 1995:31);
- Tell Sa'idiyeh: Iron jewellery and weapons from the burial caves (McGovern 1995:31).

Points of connection for the Baq'ah Valley through the Jordan Valley:

- Megiddo: Ceramics of Caves A2 and B3 with burial assemblage of Pella Tomb 1 (Homes-Fredericq & Hennessy 1989a:33);
- Aegean (via the port at Abu Hawam): Four Mycenaean IIIB/IIIA vessels from central mainland Greece (according to chemical profiles and a Cypriot White Slip II 'milk bowl' and Base Ring II juglet (Homes-Fredericq & Hennessy 1989a:33,35);
- Egypt: An Egyptian signet ring and cylinder seals and scarabs (Homes-Fredericq & Hennessy 1989a:33, 35).

4.2.4.4 Safut

Tell Safut is located on the edge of the modern Amman-Jerash highway, 1.5 kilometers north of Suweileh where the highway begins its descent into the Baq'ah Valley. This strategic position, supported by a perennial spring, made the location ideal for a large Middle Bronze Age through Iron Age II site to develop. The site is mentioned in the early explorations of Merrill (1877) and Glueck (1930s). It was excavated in five seasons (1982, 1983, 1985 and 1987) by the Department of Antiquities of Jordan and Seton Hall. The published reports are limited and focus on a small seated figurine of bronze and copper with gold foil that could represent a Canaanite, Ammonite or simply a local 'Safut' deity. It was found inside the Late Bronze Age defensive wall in a building described as a sanctuary. Late Bronze Age ceramics consisted of a chalice and pedestalled bowl. 600 cubic centimeters of burned two-row barley were also discovered under the destruction layer separating the Late Bronze Age level from the Iron Age I level. Wimmer presents a historical geographical case that the site be identified with Nobah on the 'route of the nomads' (Judges 8:11) (Wimmer 1989:512-515; c.f. Homes-Fredericq & Hennessy

1989b). The large defensive walls and barley point to a settled population during the Late Bronze Age. Safut's strategic location on the ridge route between the Baq'ah Valley and Amman would make it an important point on any traffic coming out of the Wadi Zerqa/Dananir route and continuing south (i.e. towards the Amman airport site) (Wimmer 1987:279-283).

Points of connection for Tell Safut in the Jordan Valley:

- Deir 'Alla: A chalice with solid feet very similar to one found at the Amman Airport site parallels with similar pieces found at Deir 'Alla in the Late Bronze Age Phase E. Other pottery pieces paralleled with Deir 'Alla Late Bronze Age Phase D (Van der Steen 1996:58; 2004:119-120);
- Beth-shan: Several imitation Cypriot pieces (similar to those from Jebel Nuzha) are parallel with those from Beth-shan tomb 27 (Van der Steen 1996:58; 2004:119-120).

4.2.4.5 The Amman Area

According to Younker (1999:189-218), there is little archaeological evidence for actual settlements in the first part of the Late Bronze Age in the Amman area. The evidence does show human activity, but only in the latter part of the Late Bronze Age IIB are there clear settlements. Twenty sites in Amman area are dated to the Late Bronze Age. A number of them are tombs.

4.2.4.5.1 Amman Airport Building

Excavations at the Amman Airport Building were conducted in 1955 by the Department of Antiquities of Jordan under the direction of Lancaster Harding (1958) and the British School for Archaeology. It was directed by Hennessy in 1966 (Hennessy 1966). The building was removed in 1978 for construction of the Marka airport.

The building was 15 x 15 meters with walls 2 meters wide. According to Harding (1958:10), it was a temple but the large number of fragments (several thousand) of burned human bones may suggest some kind of crematorium along the Hittite's

tradition (Zwicker 1994:77-78 cf. Van der Steen 2004:39). It was situated centrally in an oval plain, one kilometer east of the Zerqa River. There were large amounts of imported material: Mycenaean pottery (Mycenaean IIA-IIIB), an Egyptian Khepesh sword, bronze weapons and vessels, jewellery of gold and other materials and scarabs and cylinder seals, all dated to the second half of the 15th century. The scarabs were all of the Egyptian type, dating between 1900 and 1350 BC (Ward 1964:47-55). The seals were in the Syrian-Mitannian tradition. There were also a number of Egyptian stone vessels dated to the 18th and 19th Dynasties.

Hennessy distinguished three occupation phases. The first level, dated to the last half of the 15th century, consisted of Mycenaean IIA-IIIB pottery as well as the Egyptian scarabs and Syrian-Mitannian cylinder seals. One rare Babylonian seal bearing a religious inscription was also found. A number of the ceramic bowls and kraters and pilgrim flasks are parallel to those of Deir 'Alla Late Bronze Age Phases F-G. Nearly a third of all the ceramics were imported – primarily Mycenaean ware (cf. Homes-Fredericq & Hennessy 1989a:167-177; Van der Steen 1996:55-56; Van der Steen 2004:39, 117). Occupational use of the building appeared to have been limited to the Late Bronze Age II (cf. Homes-Fredericq & Hennessy 1989a:167-199).

4.2.4.5.2 The Amman Citadel

A sherd of rare Egyptian New Kingdom blue-painted ware was found as well as a chalice with a straight, solid foot with parallels in the Jordan Valley (Van der Steen 1996:57).

4.2.4.5.3 Jebel Nuzha

A tomb on Jebel Nuzha, part of modern Amman, was first excavated and published by Dajani (1966) who attributed it to the Iron Age. Dornemann reviewed the pottery in 1983 and redated it to the end of the Late Bronze Age due to the tomb's ceramic similarities with the more recently published pottery reports from Deir 'Alla in *Annals of Department of Antiquities of Jordan* in the years 1976; 1977; 1978; 1982; 1983 as reviewed by Van der Kooij & Ibrahim (1989) and Van der Steen 2004) and the Baq'ah Valley (McGovern 1986). The Jebel Nuzha repertoire fits much better into

the styles of these two sites which were dated to a Late Bronze Age context. Several of the matching styles are limited to the Late Bronze Age Phases E styles at Deir 'Alla. Several of the imitation Cypriot bilbils match those from the Late Bronze Age cemetery at Beth-shan (cf. Dornemann 1983:31; Van der Steen 2004:118).

4.2.4.5.4 Khirbet el-Hajjar

A small site situated at a strategic location west of Amman, with a wide view to the north, east and south. According to the excavator, 'it stands at the headwaters of the Wadi Kafrein, which flows west to join the Wadi Rama (Hesban), following the Wadi Abu Gharaba' (Thompson 1972). This was probably a major route to the Jordan Valley as it is today on the Amman-Jaur-Jerusalem Highway (Thompson 1972:48). The excavations in 1972 reported that the site was first occupied in the Late Bronze/Early Iron Age transition but none of the pottery has been published (Van der Steen 2004:41).

Points of connection for the Amman Area with the Jordan Valley:

- Deir 'Alla and the Baq'ah Valley: Ceramics from the Amman Airport match Late Bronze Age Phase E styles at Deir 'Alla;
- Beth-shan: Several of the imitation Cypriot bilbils from the Amman Airport building match those from the Late Bronze Age cemetery at Beth-shan (cf. Dornemann 1983:31; Van der Steen 2004:118).

Points of connection for the Amman area through the Jordan Valley:

- Aegean (via the port at Abu Hawam): Mycenaean IIA to IIIB 1 ware, Late Cypriot Base Ring I and II, White Slip I and II (Homes-Fredericq & Hennessy 1989a:169 171);
- Egypt: Hundreds of fragments of Egyptian stone vessels, mainly XVIII and XIX Dynasty but some Middle Kingdom (Homes-Fredericq & Hennessy 1989a:171). A sherd of rare Egyptian New Kingdom blue-painted ware was found as well as a chalice with a straight, solid foot with parallels in the Jordan Valley (Van der Steen 1996:57).

4.2.4.6 Sahab

Sahab lies 12 kilometers southeast of Amman on the plateau, in the transition zone between the highlands and the desert. From 1972 onwards, Sahab has been excavated by the Jordanian Department of Antiquities, under M. Ibrahim (1972, 1974 & 1987). During the Late Bronze Age, Sahab was a walled city much larger than the preceding Middle Bronze Age settlement. This makes it one of the first walled towns in the Late Bronze Age. A building with walls constructed of dressed stones was found and dated to the 14th-13th centuries on the basis of a seal impression on a storage jar which was from the reign of Thutmose III (Van der Steen 2004:36). The outer walls were 1.2 meters wide and the east-west walls had a minimum length of 17 meters. A total of 75 meters of walling was revealed by the end of the 1987 season (Ibrahim 1987:76). Outside one of the walls was a tower-like projection.

Sahab was an oval-shaped town wall with a deep stone-lined foundation trench. Several burial caves have been excavated as well as the town itself. Tomb C, a multiple burial cave with a similar Egyptian seal to that found in the wall, as well as the pottery collection, dates the tomb to the early Late Bronze Age (Dajani 1970; Ibrahim 1987:76). Tomb C artifacts consisted of a number of double pithos burials using collared rim jars and Mycenaean pottery (Ibrahim 1972:32; Van der Steen 1996:56). There were also two wooden coffins, older than the collared rim jar burials. Burial gifts consisted of oil lamps, small bowls, jars, locally produced alabaster ware, Egyptian objects (Ibrahim 1987), weapons, jewellery and artifacts made of bronze and iron. Other seal impressions on some of the jars in the tomb suggest a Syrian influence (Ibrahim 1972:34; 1987:78). Comparable seal stamps have been found in Shiloh (cf. Finkelstein 1988:27-80; Van der Steen 1996:56). The biconical jars with long necks are parallel with those from Beth-shan and several chalices and flasks are similar to those of Deir 'Alla Late Bronze Age Phases E-F (cf. Van der Steen 2004:115).

Points of Connection for Sahab with the Jordan Valley:

- Tell Sa'idiyeh: Double-pithos burials (Ibrahim 1987:74-75).

Points of Connection for Sahab through the Jordan Valley:

- Egypt: Various ceramics, one with an 18th Dynasty seal on the handle found in the wall foundations and an 18th Dynasty scarab (Ibrahim 1987:76-77);
- Aegean (via the port at Abu Hawam): Mycenaean import and imitations (Ibrahim 1987:75).

4.2.4.7 Madaba

Two burial caves on the Madaba Plateau have been excavated with Late Bronze-Iron Age I transition pottery.

Tomb A was excavated in the 1950s by Harding and Isserlin. Several bowls, pilgrim flasks and a 'tea pot' with close parallels to Deir 'Alla Late Bronze Age Phases E and F have been identified as well as several Mycenaean import wares (Harding & Isserlin 1953; Van der Steen 2004:111).

Tomb B appears to overlap Tomb A but had more Iron Age material. Still, a number of ceramic pieces are very similar to Late Bronze Age II finds at Tell Sa'idiyyeh and the northern cemetery of Beth-Shan as well as Khirbet Umm Dananir and Jebel Nuzha on established trade routes to the Jordan Valley. Several chalices appear to be identical to those at Deir 'Alla from Late Bronze Age Phase E to Iron Age Phase A (cf. Geraty & Herr 1986:316-317; Van der Steen 2004:112).

Points of connection for the Madaba Tombs in the Jordan Valley:

- Deir 'Alla: Several bowls, pilgrim flasks and a 'tea pot' with close parallels to Deir 'Alla and several identical chalices match those from Late Bronze Age Phases E and F (Harding & Isserlin 1953; Van der Steen 2004:111-112; Geraty & Herr 1986:316-317);
- Tell Sa'idiyyeh: A number of ceramic pieces are very similar to Late Bronze Age II strata finds (Geraty & Herr 1986:316-317; Van der Steen 2004:112);
- Beth-Shan: A number of ceramic pieces are very similar to Late Bronze Age II strata finds (Geraty & Herr 1986:316-317; Van der Steen 2004:112).

Points of connection for the Madaba Tombs through the Jordan Valley:

- Aegean (via the port at Abu Hawam): Mycenaean import wares (Harding & Isserlin 1953; Van der Steen 2004:111).

4.2.4.8 Tell 'Umeiri

Tell 'Umeiri, just south of Amman, has been extensively excavated by the Madaba Plains Project from the late 1980s to the present. An impressive Late Bronze Age building and defensive system was found with walls more than a meter wide (Clark 2000:59-64). There was no sign of a break between the Middle Bronze, Late Bronze and the Early Iron Age occupations. A number of different pottery styles have been identified with clear parallels to many sites in the Jordan Valley as well as east and west of the valley. Jugs with flaring rims are parallel with Deir 'Alla, Pella and Beth-Shan as well as the Ba'qah Valley, Amman Airport building and Gezer (Herr, Geraty, Labianca & Younker 1997:234). Other styles such as deep and shallow bowls with light colored slip and kraters are identical to Deir 'Alla in the Late Bronze Age Phases E-H (cf. Herr et al 1997:219-238; Van der Steen 2004:113-114).

Points of connection for 'Umeir in the Jordan Valley:

- Deir 'Alla: Deep and shallow bowls with light colored slip and kraters are identical to Deir 'Alla in the Late Bronze Age Phases E-H (cf. Herr et al 1997:219-238; Van der Steen 2004:113-114);
- Pella: A number of different pottery styles have been identified with clear parallels (Herr et al 1997:234);
- Beth-Shan: A number of different pottery styles have been identified with clear parallels (Herr et al 1997:234).

Points of connection for 'Umeir through the Jordan Valley:

- Gezer: A number of different pottery styles have been identified with clear parallels (Herr et al 1997:234).

4.2.4.9 Sites south of the Madaba Plateau

Several sites south of the Madaba Plateau, along or near the King's Highway, also show connections with the Jordan Valley.

4.2.4.9.1 Mediente el-Mu'arradjeh

This site is located south of Wadi Mujib. Excavated by Olavarri in 1982, a number of pottery pieces from the Late Bronze Age II strata parallel those of Deir 'Alla Late Bronze Age Phases E and F and those from Tell 'Umeiri (Olavarri 1983; Van der Steen 2004:108-109).

4.2.4.9.2 Lahun

This site is located southeast of Dhiban, 30 kilometers south of Madaba. A Belgian team under the direction of Homes-Fredericq excavated this site between 1986 and 1997. The Late Bronze Age levels revealed a fortified village and a number of domestic houses. A XXth Dynasty scarab was uncovered and some possible Mycenaean ware (cf. <http://www.lehun-excavations.be/> accessed 12 December 2011).

The connections points made by artifactual parallels in the eastern highlands are dispersed throughout the north, central and southern points of the plateau. They appear to connect through the Wadi Jabbok and other more northern routes exclusively, demonstrating that the north and central sections were very well connected with the eastern highlands.

4.2.5 Excavation in the western highlands

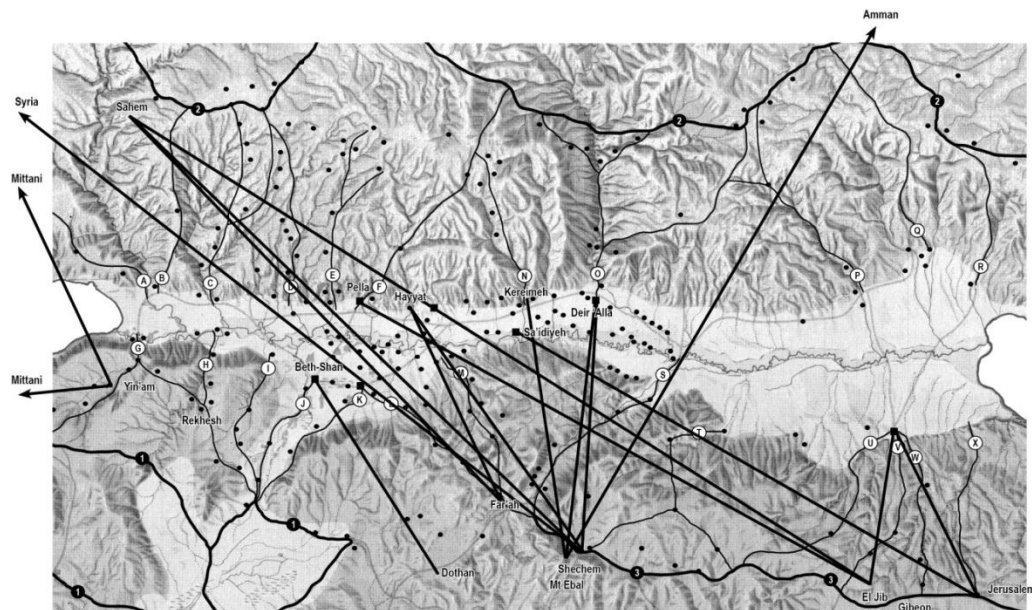


Figure 4.26: The western highland connections

The western highland connection points originating from Tells Yin'am, Tell Balatah (Shechem), Far'ah (north), Dothan, Mt. Ebal, Shiloh, and El Jib/Gibeon. The connections points are much fewer than from the eastern highlands. This is probably due to the fact that most of the western highland reports are from the 1980s or earlier and many of the Transjordanian publications are after 1980. (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

4.2.5.1 Tell Na'am/Tell Yin'am

Tell Na'am is located on the Yavne'el Plateau on the eastern Lower Galilee (it is a suggested site for Yanoam by Garstang). It was excavated by the University of Texas at Austin for seven seasons from 1976 to 1989 under Liebowitz. The site had scattered remains from the early Late Bronze Age and appeared to be abandoned until the late 14th century. At the beginning of the Late Bronze Age II, four strata of occupation were uncovered. The main occupation during the Late Bronze Age III was Stratum VIB where a large building, labeled a palace, was uncovered. A number of artifacts were recovered from several rooms including material from both Egypt and Mitanni. Mycenaean IIB stirrup jars were also found (Liebowitz 1982:64-66). The palace was destroyed towards the end of the 13th century and rebuilt as an industrial complex with signs of metal work. A large collection of store jars, pithoi, kraters and small juglets are also reported from the palace area. However, none of the pottery has been published so further analysis is difficult.

Points of connection for the Madaba Tombs in the Jordan Valley:

- Northern Jordan Valley: This is an indirect inference. Egyptian jewellery and scarabs as well as the Mycenaean IIB ware shows that the site was connected to the international trade network at the time. It would be hard to imagine, with this participation and geographic location to the Jordan Valley via the Nahal Yavne'el, that the site did not have some interaction with the Jordan Valley sites (cf. Hasel 1998:148-149; <http://faculty.ksu.edu.sa/archaeology/Publications/The%20Near%20East/Arc%20heological%20Geology%20of%20Tel%20Yin%27am,%20Galilee.pdf> accessed 7 December 2011).

Points of connection for the Madaba Tombs through the Jordan Valley:

- Mittani: This is an indirect inference. The finds of Mittanian seals could be traced through routes going east into the Jordan Valley or north-northwest.

4.2.5.2 Tell Rekhesheh/Tell Mukharkhash

Tell Rekhesheh/Tell Mukharkhash is one of the two largest sites in the Lower Eastern Galilee. It is located at the top of the Nahal Tavor commanding a natural connection point between the Lower Galilee and the Jordan Valley. The site covers 4000 square meters. Various surveys have collected fragments of an Egyptian stele, a clay model of a temple and complete pottery from various periods. The site has been excavated for five seasons (2006-2009) by a Japanese expedition led by Nakatani. The primary focus has been on a dense Iron Age I settlement strata of public buildings and a cultic installation. Late Bronze and Middle Bronze Age IIB strata have been reported with a brief mention of a large fortification system and buildings from the Late Bronze and Early Iron Ages around the acropolis of the tell

(cf. <http://rekhesheh.com/html/about%20the%20site.html>;

<http://israelexplorationsociety.huji.ac.il/IEJ%20vol%2060-1%20for%20website%20with%20abstracts.pdf>;

http://www.cismor.jp/en/lectures/index.php?c=event_en_view&pk=1274170323&PHPSSESSIONID=ik0k00n9nnpnqc5hsmi7nd0fqa0 accessed 2 December 2011).

The brevity of the preliminary reports does not allow any connection points with the Jordan Valley to be made at this point.

4.2.5.3 Tell Balatah (Shechem)

Shechem sits on the lower slope of mount Ebal on the eastern side. The site was excavated by Sellin in 1913-1924, in 1926-1927 and in 1934. All these field reports were destroyed by Allied bombing in World War II. In 1956-1968, a joint expedition by Drew University and McCormick Theological Seminary, directed by G.E. Wright and Anderson, returned to the site. In 1972-1973 Dever conducted a rescue excavation of the Middle Bronze Age layers (Dever 1974). According to the excavators, the Late Bronze Age occupation did not start until Late Bronze Age IB (1450) (Toombs 1972:105) when a new fortification system was built on the ruins of the Middle Bronze Age fortifications. The Middle Bronze Age temple was also rebuilt as a broad room temple with a *massebah* on either side of the entrance and a large altar in the court. A bronze figurine of the god Baal was found in this area by Zwickel (Zwickel 1994:83-85). The houses in this stratum have been laid according to a coherent plan, giving the impression of developed city planning. No traces of destruction are found at the end of the Late Bronze Age (Wright 1965:670). The first Iron Age stratum (Str. XI) is basically a continuation of the Late Bronze Age stratum. No reports have been published on the excavations except for a few photographs of pottery pieces (Boraas 1986). Van der Steen identifies one piece in the photographs as, 'a painted biconical jar with no neck and flaring rim that was common in Deir 'Alla Late Bronze Age II' (Van der Steen 2004:127) (cf. Van der Steen 1996:58; 2004:50-51, 127-128). The cave tombs included a large repertoire of some 2000 pottery vessels and numerous objects belonging to Late Bronze Age I and II. Among the pieces are 'an unusual number of Chocolate-on-White and some Syrian bottles' (Gonen 1992:59).

Points of connection for Shechem in the Jordan Valley:

- Deir 'Alla: A painted biconical jar with no neck and flaring rim that is common in Deir 'Alla Late Bronze Age II (Van der Steen 2004:127);
- Northern Jordan Valley: Chocolate-on-White ware (Gonen 1992:59).

Points of connection for Shechem through the Jordan Valley:

- Syria: Syrian bottles (Gonen 1992:59).

4.2.5.4 Tell Far'ah (north), Dothan, the Bull Site and Mount Ebal

4.2.5.4.1 Tell Far'ah

Tell Far'ah is located in the hills of Samaria, northeast of Shechem. It has been identified with Biblical Tirzah (Joshua 12:24; I kings 14:1-18). Excavations occurred between 1946 and 1960 for nine seasons by the École Biblique under the direction of Roland de Vaux. The site was occupied from Palaeolithic times through the Roman era. In the Middle Bronze Age II, there was a small settlement on the site that used the remnants of the Early Bronze Age walls. In the 1700s, the population expanded and a new wall was built, but it enclosed a smaller area than the older city. The Late Bronze Age remains are few and poorly preserved. A small sanctuary dated to either the end of the Late Bronze Age or to Iron Age I was built on top of an earlier small gate shrine (Van der Steen 2004:52). Late Bronze Age burials contained Mycenaean and Cypriot pottery (Van der Steen 2004:52).

4.2.5.4.2 Dothan

Dothan is located 22 kilometers north of Shechem and was excavated between 1953 and 1964 by Free. Preliminary annual reports were published in 1953-1960 (with little detail). The final excavation report was finally published in 2007. Out of the 21 occupational levels between the Chalcolithic to Byzantine periods, only three pages are given to the Late Bronze Age. Most of the Late Bronze Age material appears to have come from the Western Cemetery where three Late Bronze Age II to Iron Age I tombs were excavated. Tomb I contained 3400 objects (Masters 2005:177). Items included imported Mycenaean and Cypriot pottery and 25 Egyptian scarabs. The structure and layout of the tomb is similar to those of Late Bronze Age I Beth-shan and Late Middle Bronze Age Jericho as well as Megiddo and Gibeon (Coogan et al 1995:80, 87-88). Late Bronze Age II material is virtually absent except in the Late Bronze Age II/Iron Age IA tombs (Masters 2005:65-66). Dothan's Late Bronze Age/Iron Age I pottery is related to Tell Farah (north), Shechem and Shiloh (cf.

Grabbe 2010:179-181). These other sites have been shown to have connections with Deir 'Alla in the Jordan Valley and it is reasonable to consider Dothan had these as well, based on the small 'hints' of artifacts but primarily on the basis of geography and relations with the other western settlements. No attempts to analyze the provenance of the clay used in the Late Bronze Age Tomb I ceramics have been made (Van der Steen 2004:125).

4.2.5.4.3 The Bull Site

The Bull Site is located in north Samaria. This small site was excavated by Mazar in 1978-1981. The site is limited to a circular stone wall on top of a hill with no other traces of settlement. A large stone in the center has been interpreted as an altar (Mazar 1982:28-39). Pottery at the site dates to the Late Bronze-Early Iron Age transition and shows parallels with Deir 'Alla, especially with regards to some of the handle decorations (Van der Steen 1996:61-62). A unique bronze bull in Canaanite traditions found at the site gives it its name. There are parallels with Ugarit, Hazor and Ashkelon as well as Cyprus, Mari and Ebla (cf. Van der Steen 2004:53; Mazar 1982:28-39).

4.2.5.4.4 Mount Ebal

Mount Ebal, located on the north-eastern slope of Mount Ebal, was excavated between 1982 and 1989 by Zertal. Zertal identified the site as an open cult place. Two strata were identified. Stratum II was dated between 1240 and 1200 based on pottery. The excavation showed a number of multi-room structures and storage areas with paved courtyards connected by stairways. In the storage areas, a large number of sherds, bones and ashes were found that Zertal relates to ceremonial activities. On the edge of the site were a hundred circular and rectangular stone installations (30-70 centimeters wide containing much pottery). Two styles of bowls with three holes forming a triangle in the handle are parallel with examples from Deir 'Alla Late Bronze Age Phase E and from a surface survey at Kereimeh (cf. Van der Steen 1996:61-62; 2004:51-52; 126-127).

Points of connection for Tells Far'ah (north), Dothan, Mount Ebal and the Bull Site in the Jordan Valley:

- Deir 'Alla: Late Bronze Age-Early Iron Age transition ceramics show parallels with Deir 'Alla, especially in regard to some of the handle decorations (Van der Steen 1996:61-62; 2004:51-52; 126-127);
- Kereimeh: Two styles of bowls with three holes forming a triangle in the handle (cf. Van der Steen 1996:61-62; 2004:51-52; 126-127).

Points of connection for Tells Far'ah (north), Dothan, Mount Ebal and the Bull Site through the Jordan Valley:

- Mari and Ebla: An indirect inference from the unique bronze bull in Canaanite traditions with parallels in Ugarit, Hazor and Ashkelon (cf. Van der Steen 2004:53; Mazar 1982:28-39).

4.2.5.5 Shiloh (*Khirbet Seilun*)

Shiloh was excavated in 1922-23 and in 1963 by Danish teams and in 1981 by Bar Ilan University, directed by Finkelstein (1993). Shiloh is located in the western highlands, 16 kilometers north of Ramallah. It sits on the confluence of two wadis and is surrounded by fertile land. Finkelstein concluded that there was a sanctuary on the top of the tell that he dated to Middle Bronze Age IIC and a wall and glacis around the tell. Finkelstein reports no findings of any Late Bronze Age structures, only a great deal of Late Bronze Age pottery and other artifacts (Finkelstein 1993). There is only one Late Bronze Age stratum so all the artifacts are lumped together in one general time span. There is a small occupation gap between the Late Bronze Age and the Iron Age. Van der Steen summarizes that no Late Bronze Age parallels with the Jordan Valley have been made except for biconical jugs with long curved necks that have parallels at Tell Sa'idiyeh. These jugs are similar to those of the eastern highlands found at Sahab's Late Bronze Age strata as well as a type of bowl from the Early Iron Age strata (2004:49, 128, 130). Finkelstein makes a case for an Iron Age sanctuary at Shiloh on the Biblical account and the site being used as a sanctuary in the Middle Bronze (and presumably Late Bronze) Age periods as well (cf. Finkelstein

1993; Van der Steen 1996:58; 2004:49-50, 128). The pottery from Shiloh also has parallels with that from Deir 'Alla (Van der Steen 1996:61-62) on Late Bronze Age/Iron Age transition.

Points of connection for Tells Far'ah (north), Dothan, Mount Ebal and the Bull Site in the Jordan Valley:

- Deir 'Alla: Biconical jugs with long curved necks (Van der Steen 2004:49, 128, 130) as well as several other styles from Deir 'Alla's Late Bronze Age/Iron Age I transition phases (Van der Steen 1996:61-62);
- Sa'idiyeh: Biconical jugs with long curved necks (Van der Steen 2004:49, 128, 130).

Points of connection for Tells Far'ah (north), Dothan, Mount Ebal and the Bull Site through the Jordan Valley:

- Sahab: Biconical jugs with long curved necks parallel those from Sahab's Late Bronze Age strata as well as a type of bowl from the Early Iron Age strata (Van der Steen 2004:49, 128, 130).

4.3 SUMMARY

The following map is a composite of all the connecting points made in this chapter.

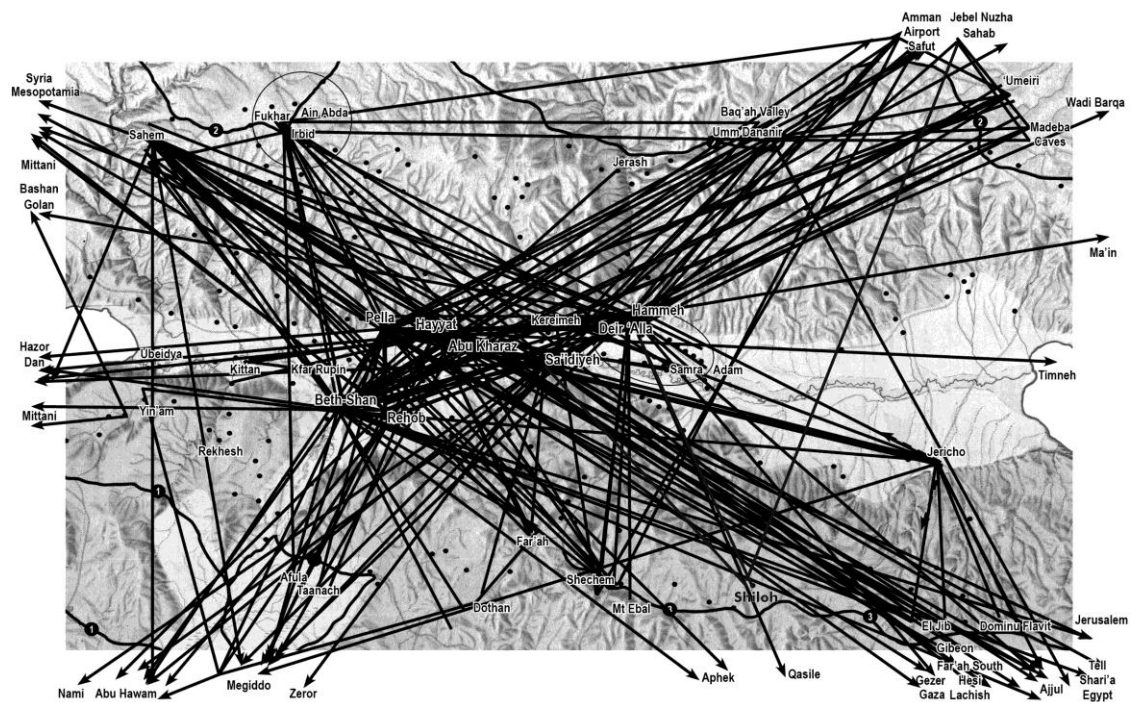


Figure 4.27: A composite showing all the parallel connection points mapped out in this chapter
(Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011)

The connection points between the various sites illustrated by straight lines in all the maps of this chapter may be misleading. For any connection or exchange between two sites would need to follow established roads. These routes would naturally lead through intervening sites along the route. These in-between cities may easily have acted as a trade hub or 'middle-men' where artifacts from one site were mixed with items from another, eliminating or decreasing the actual degree of interaction between the points of origin and destination.

A more accurate composite map of all the connections should actually follow the most direct main transportation routes. This would look closer to Figure 4.4 showing the likely route of Mycenaean ware via intervening cities functioning as trade hubs. Mapping connection points along the established trade routes would actually increase the connection points of strategic sites like Deir 'Alla, Sa'idiyeh, Beth-shan and Rehob as they would be natural hubs and way-points for trade. An illustration of this more accurate mapping would be to remove the straight line of connecting Amman to Beth-shan having it run from Amman, through Safut, Um Dananir, Deir 'Alla to Beth-shan and possibly several other sites along the route. Each of these sites would dilute the influence and 'connectedness' between the two distant points.

The composite map of Figure 4.27 is still useful in showing the breadth of the integration between the Jordan Valley and the highlands. The density and intersection points of the straight lines of the composite map (Figure 4.27) still highlight strategic hubs and centers of the Jordan Valley.

Was the Jordan Valley an integrated geographic/economic unit?

Based on the connecting points of artifactual parallels, the Jordan Valley cannot be considered a single economic unit but rather as two units. The northern and central sections were integrated into one unit. The southern section had much fewer connection points and, as a result, was a separate, more isolated unit. Surveys showing Late Bronze Age sites on the eastern side of the southern section have not resulted in establishing any Late Bronze Age cities. The north and central sections of the valley have many more connection points, not only between themselves, but with the highlands, than the southern section. The southern section appears even more isolated when you remove the connection points established by Jericho's Middle Bronze/Late Bronze Age transitional material. In referring to the southern section of the valley during the Late Bronze Age, one could almost use Jericho as a synonym, as the archaeological record has shown no other Late Bronze Age urban center in this section.

The far northern section of the Jordan Valley appears to have a gap in the archaeological record and its connections to the rest of the valley and the Lower Galilee. There have been other excavations in the area, other than the two mentioned earlier. Gesher is one of the more recent excavations, conducted by Garfinkel in 1986-1987. Several Middle Bronze Age IIA tombs were found with bronze material parallel with other regional Middle Bronze Age II sites, but no Late Bronze Age strata were reported (Garfinkel 2001:143-157). Another Survey, the Jisr Shekh Hussein Regional Survey, conducted a focused survey of the 4 x 3 kilometer area along the flood plains of the Jordan River around the Sheikh Hussein Bridge. Lenzen conducted this focused survey on seven sites in this small area (Tells Abu Arabi Shamalie, Arba'in, Fendi, Udsiyye, Saleem el Jusef, Sheikh Hussien and Yarfa) in

1986. However, no report has been published on his findings (Homes-Fredericq & Hennessy 1989a:66-67).

There are probably more connections than those currently published but they are probably fewer than the rest of the northern section. The reason being is the sparse population of the lower east Galilee and the general isolation of the northern tip of the valley and the lower eastern Galilee which are bypassed by the main international and regional trade routes. Routes around the Sea of Galilee and due east-west in the northern tip were most likely limited to local traffic as regions further beyond were serviced by larger more direct routes on the international network.

To what extent was the Central Jordan Valley interacting with the eastern-western highlands and the larger region during the Late Bronze Age?

From the artifactual parallels and connections, the northern and central sections cannot be defined as being separate from the immediate highlands to their east and west. The north-central Jordan Valley was highly integrated with the highlands (more with the eastern than the western) throughout the Late Bronze Age. The south (the Jericho oasis) has more connection points due west, up in the highlands than with the north-central section of the valley. Jericho connections are primarily in the Middle Bronze/Late Bronze Age transition before all artifactual connections cease. Current excavations at Jericho and Tell Hammam will hopefully provide further clarity on this pattern in the south in the near future.

CHAPTER 5: CONCLUSION

5.1 INTRODUCTION

This thesis is a survey of the Jordan Valley during the Late Bronze Age. The research employed a multi-disciplinary approach consisting of geography, history and archaeology. Chapter 2 reviewed the geography of the valley and surrounding areas from a physical and human geographic perspective. Chapter 3 reviewed the Egyptian epigraphic sources and the Biblical narratives of Numbers, Joshua, Judges, Ruth and I Samuel. Chapter 4 are dealing with selected archaeological reports of excavated sites in the Jordan Valley and surrounding highlands. Each discipline, geography, history and archaeology, attempted to answer the same two questions:

- Was the Jordan Valley a single geographic/economic unit during the Late Bronze Age?
- To what extent was the Jordan Valley interacting with the eastern and western highlands during the Late Bronze Age?

The answer to these questions provides a foundational starting point for understanding 1) the Jordan Valley's role in the more complicated political environment of the rising local/regional kingdoms of the Iron Age and 2) the Egyptian and Mesopotamian empires' desire to assert control over the southern Levant throughout the Iron Age, Assyrian, Babylonian, Persian, Hellenistic and Roman periods. The answer to these two questions also contributes to the study of understanding the early and late conquest models as narrated in the Biblical accounts of Numbers, Joshua, Judges, Ruth and I Samuel. The multi-disciplinary approach to both questions models a historical geographic hermeneutic for exploring ancient Near Eastern history that this researcher would like to encourage across all three disciplines. This chapter will summarize the preceding data that each discipline produced in addressing these two questions and will conclude with a synthesized answer for each question.

5.2 THE JORDAN VALLEY: A SINGLE GEOGRAPHIC/ECONOMIC UNIT DURING THE LATER BRONZE AGE?

5.2.1 Geography

At first glance at the physical geography, the Central Jordan Valley appears to be one single section of the larger Dead Sea Transform ('Great Rift Valley'), separated from the longer depression of the transform by the Sea of Galilee and the Dead Sea. Its eastern and western boundaries are clearly defined by steep escarpments broken only by a few narrow wadis and the 2-3 kilometer wide gentle slope of the Harod Valley.

Looking at the shape of the valley floor and the intervening wadis of the escarpment (with their alluvial fans), it is easy to divide the Jordan Valley up into three sections, north, central (the 'waist') and south. These three divisions are based on the simple width of the valley floor and the entrance of the major wadis, Yarmuk, Jabbok (Zerqa), Slopes of Abrim, Harod and Farah. A closer examination of soil and precipitation patterns (2.2.2.2; Figure 2.50) divides the valley into two distinct regions for human interaction, the rich agriculturally friendly north-central section and the more sterile agriculturally limited south section (cf. sections 2.2.2.5.1; 2.4).

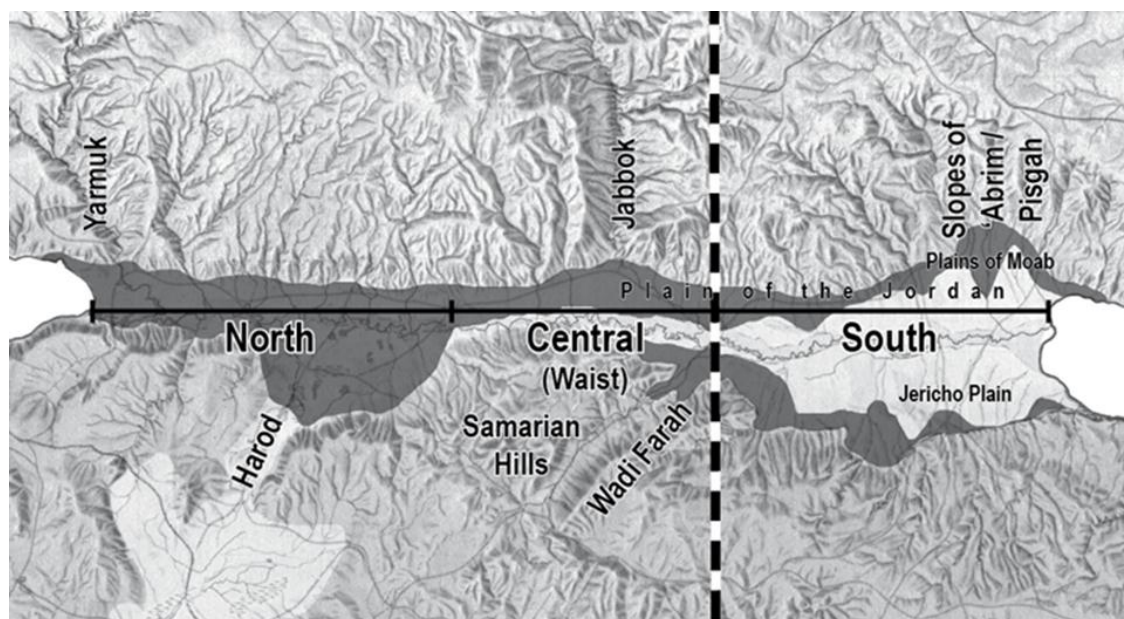


Figure 5.1: Geographic divisions of the Jordan Valley: Agricultural land
The availability of agricultural land separates the south end of the Jordan Valley from the north-central section
(Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

This is clearly emphasized in the pattern of human geography in the Jordan Valley. The north-central section has 43 identified Late Bronze Age sites compared to seven in the south. That is a settlement ratio of 6:1 (Table 2.8).

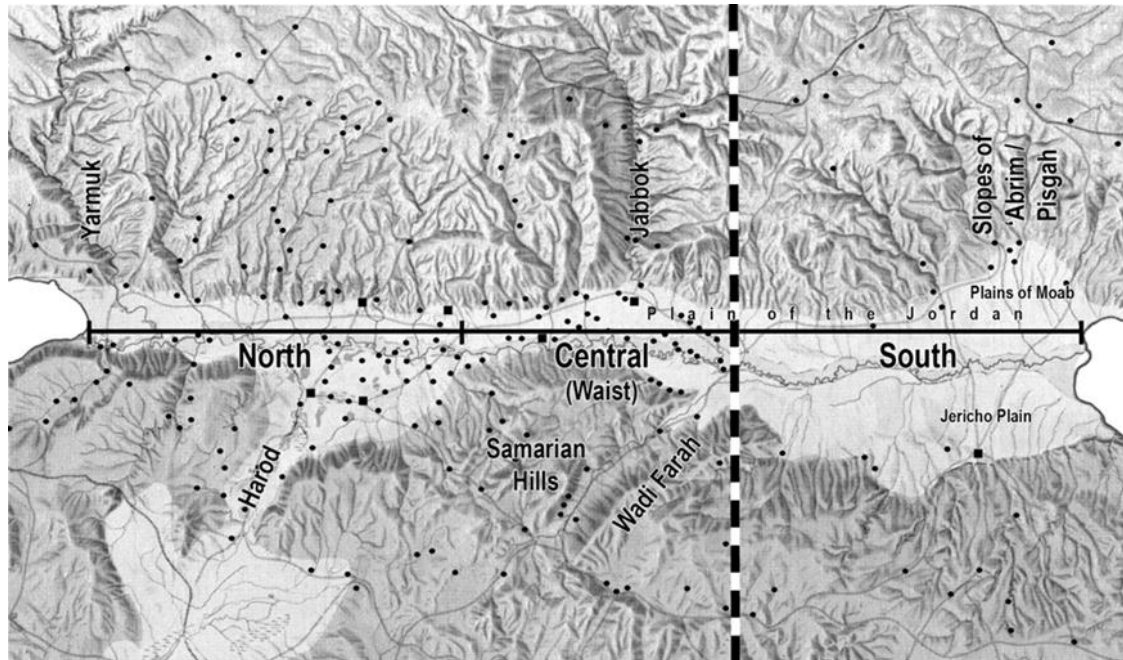


Figure 5.2: Geographic divisions of the Jordan Valley: Settlement pattern
North-central settlements outnumber the southern section by 6:1 making a clear division between the two sections (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

The ridges and wadis of the north-central section had many more established transportation routes on a regional and international scale than the primarily local routes of the south.

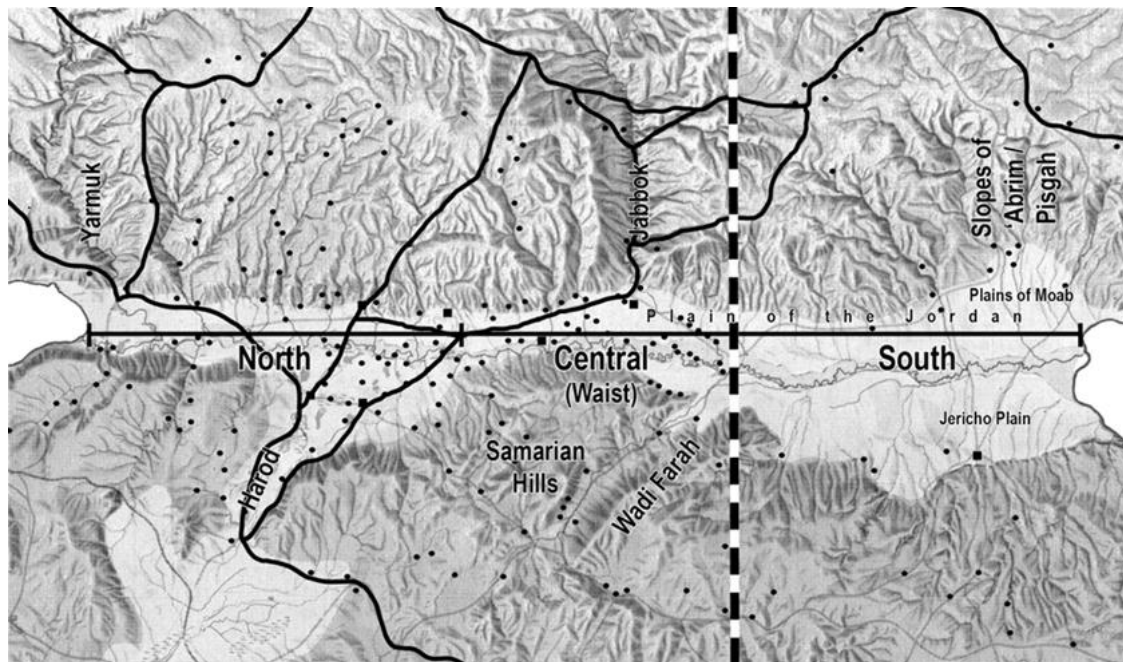


Figure 5.3: Geographic divisions of the Jordan Valley: Transportation routes
 The primary international routes for extending political, military and economic influence bypass the southern section of the Jordan Valley leaving it a separate isolated section of the valley
 (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

Both physical and human geographic patterns divide the Jordan Valley into two sections: the larger arable, populated and internationally connected north-central section and the largely sterile, sparsely populated and isolated south section.

The division between the north-central and the south section is much more dramatic than an east-west division marked by the Jordan River. During the flood season of early spring, the Jordan River could be a formidable obstacle, cutting off east-west traffic. But for the greater part of the year, the Jordan River and the wadis flowing down from the escarpment do not impede movement across them due to the existence of many fords (section 2.2.2.6.1). Only when looking at the Central Jordan Valley from a large regional scale in reference to the position of separating the eastern and western highlands and their respective international highways, can one say the Jordan Valley was a single unit. For activities in or through the valley, it is certainly not one unit but two. The historical and archaeological records reflect this similar division.

5.2.2 History

The historical record also demonstrates that the Jordan Valley was not a single unit but two. However the dividing line between the two sections is not as clear as the geographical division. The Egyptian and Biblical records (using an early conquest model) focus on two different sections of the valley. Although they do not appear to be in direct conflict with one another, expected references to one another are surprisingly absent.

The Egyptian records give accounts of the northern and central sections of the valley but are silent on the southern half. Whether this silence is due to the loss/failure of historical records or the lack of activity/interest cannot be determined at this time. The most southern Egyptian historical reference in the Jordan Valley is the city of Sabuma of EA 274 (who Albright identified with Biblical Zaphon located near the Zerqa/Jabbok River, in the central section of the valley) and the inferences of Egypt using the Wadi Zerqa for access into the eastern highlands (see 2.3.1.2.2; 3.2.1.9.6; and 3.2.2.3). This research infers an Egyptian presence in the central section during the Transjordanian campaigns of Thutmose III (Late Bronze Age I) and Ramesses II (Late Bronze Age III). Military control over the Central Jordan Valley along the Wadi Zerqa routes between the eastern plateau and the Jordan Valley in order to protect their flanks and supplies would be a strategic and tactical necessity. The topographical lists (from both campaigns) of conquered cities along the Transjordanian Highway of the eastern plateau and south of the Madaba Plateau suggest Egyptian control of the central section of the valley and up the Wadi Zerqa (cf. sections 3.2.1.5; 3.2.2.3; Figure 3.3; 3.12). That the Egyptians used and controlled this route is not only inferred in the campaigns mentioned above but the campaign of Pharaoh Shoshenq (Shishak in I Chronicles 12:1-18) in 925 BC gives a strong historical precedent for earlier Egyptian campaigns to have used this route. The topographical list of Shishak's campaign lists several cities identified as being not just along the Wadi Jabbok route but in the central 'waist' section of the valley (Rainey & Notley 2006:170-171). The rest of the Egyptian record is limited to the northern section of valley.

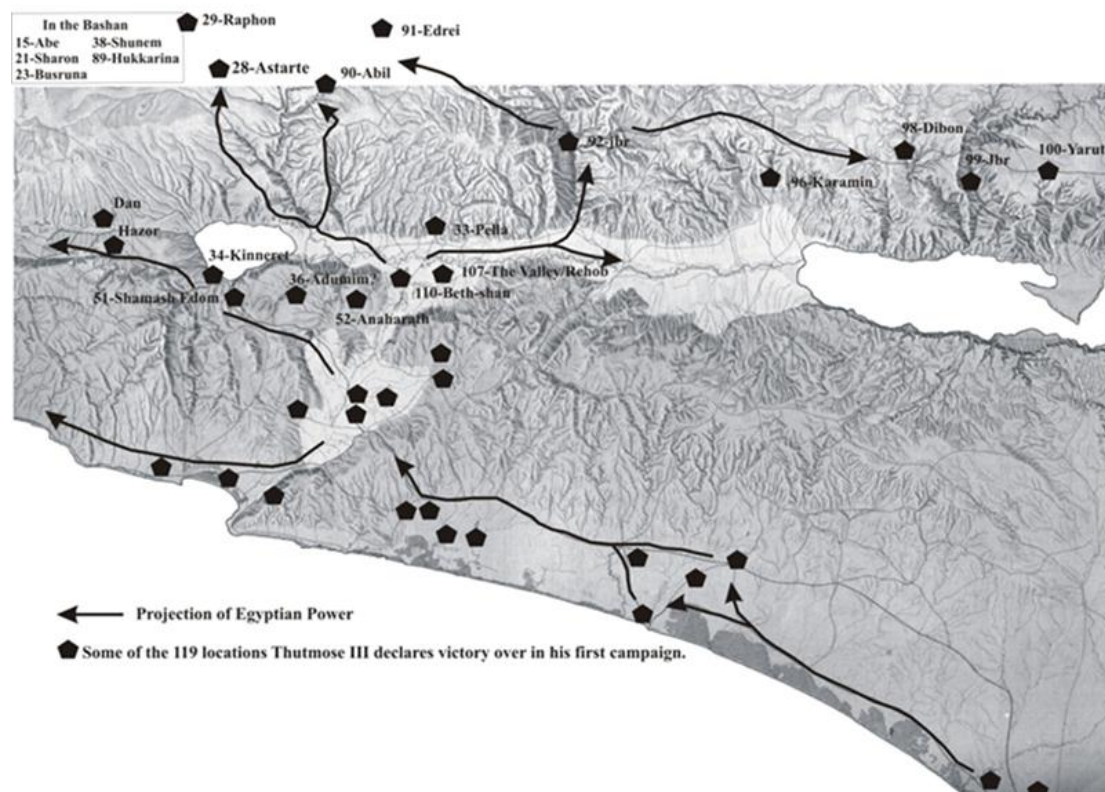


Figure 5.4: Thutmose III's first campaign route and identified cities from his topographical list (The campaigns of Seti I, Ramesses II and Shishak followed similar routes (section 3.2.1.4; Table 3.1; section 3.2.2.3-4; Table 3.8). Although only cities in the northern valley are specifically listed (excluding Shishak's list from 925 BC) the Transjordanian sites infer passage through the northern and central routes of the eastern escarpment (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

The Biblical account dealing with the Jordan Valley is almost exclusively in the southern half of the valley. The narratives of Joshua, Judges and I Samuel have the Israelite tribes in the eastern and western highlands overlooking the northern part of the valley. All the Jordan Valley activity of Numbers, Joshua, Judges and Ruth includes only the southern section with excursion into the central 'waist' around the Wadi Zarqa (the Biblical Jabbok River) with the exceptions of the migration of Dan cutting through parts of the northern valley (3.3.6.1) and the accounts of Gideon and Jephthah (3.3.5.4 and 6). Although the narratives describe divisions of the central and northern territories being allotted to specific Israelite tribes (Joshua 13-21; section 3.3.4.1), the main cities of these sections are clearly described as remaining outside Israelite tribal control during the initial 'conquest' period recorded in Joshua and Judges. The Beth-shan valley does not appear to come under Israelite tribal control until after the death of their first king, Saul (I Samuel 31:11-13).

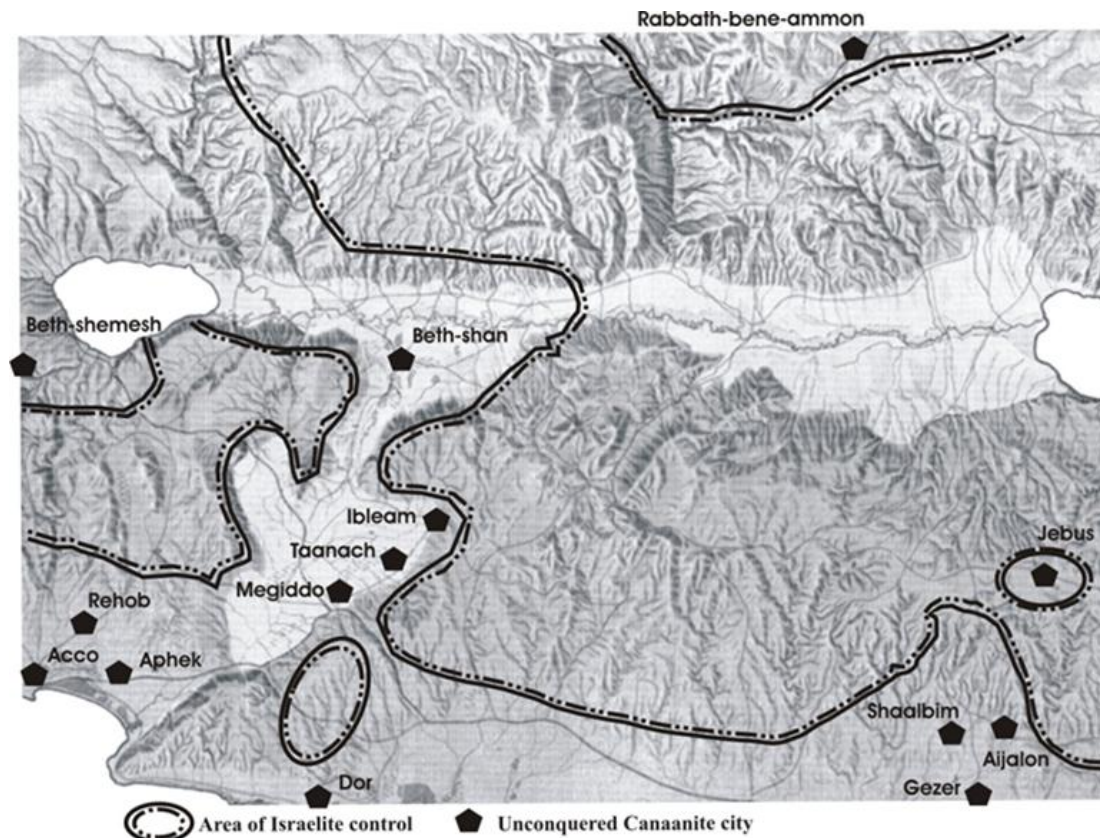


Figure 5.5: Lands of the Jordan Valley under Israelite control

At the close of Joshua's southern and northern campaigns most of the highlands were under Israelite control. The lowlands, the coastal plain, the Jezreel Valley and the northern half of the Jordan Valley remained outside of Israelite control (Joshua 17:13; Judges 1) until after the death of Saul in the Iron Age (1 Samuel 31:11-13) (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

The book of Judges gives three accounts (possibly four, if Shamgar's defeat of the Philistines in Judges 3:31 [section 3.3.5.2] is accepted as involving the foreign garrison of Sea People at Beth-shan) of Israelite and Midianite tribal activity that descend out of the highlands into and through the northern and central sections of the valley. Judges 6-8 describes the Midianites as descending from the eastern plateau and raiding the Jordan and Jezreel Valleys as far the coastal plain. Gideon leads an Israelite coalition down from the western highlands and attacks the Midianite forces in the Jezreel Valley and pursues the Midianites into the Beth-shan Valley, across the Jordan River and up the Zerqa/Jabbok Valley in the central section. The accounts of Jephthah and the Benjamite War (3.3.5.6 and 6.2) have the Israelite tribes descending from the western highlands to confront and attack their kinsmen in the east. Each of these accounts appears to be only forays out of the highlands with temporary seizures of the fords across the Jordan River. Clear occupation and settlement of the central 'waist' section is not evident until after the death of Saul (I

Samuel 31:11-13). The identity of the occupants of Succoth and Penuel in the Gideon story is not clear. The population of these cities is simply described as not giving their support and allegiance to Gideon (and the Israelite forces with him) as long as the powerful Midianite leaders were still alive (Judges 8:6; section 3.3.5.4).

The historical record clearly describes the Jordan Valley in two sections. The northern section was Canaanite under Egyptian influence of various degrees throughout the Late Bronze Age. The southern section was under Israelite, Moabite and Ammonite control as the strength of these local powers ebb and flow through the Late Bronze Age.

5.2.2.1 The Zerqa Triangle: a moving dividing line in the historical record

The central section, around the Zerqa/Jabbok Valley appears to be a transition zone with both the Egyptian and Biblical records describing control of the key fords and routes of this section at various times. The overlapping accounts in the central 'waist' of the valley are not necessarily exclusive or contradictory as the chronologies of the accounts allow for one to occupy the central section while the other is withdrawn. Egyptian, Israelite, Midianite, Ammonite and Moabite abilities to project their military and economic power ebbed and flowed during the 300 years of the Late Bronze Age. We know that Egypt withdrew its military garrison from Megiddo sometime during the Amarna period (EA 224; section 3.2.1.9). Soon after the Amarna period, Egypt's lack of power allowed many local squabbles to break out between the cities of the region (for example the La'bayu affair). Pella threatened the trade routes coming from Damascus and harbored Egyptian fugitives. Later Pella, allied with Hamath, captured the Egyptian administrative center at Beth-shan and laid siege to Rehob. Seti I led a campaign to retake Beth-shan and relieve Rehob as well as defeating Yanoam and Hamath (section 3.2.2.2) and later attacking an 'Apiru strong hold in the Lower Galilee overlooking the valley (section 3.2.2.1; Figure 3.11). The 'Apiru also took the Canaanite town of Sabuma (Zaphon?) in the central 'waist' of the valley. That the 'Apiru and Shasu are not to be equated with the Israelite tribes appears clear and beyond debate. However, the idea that the Israelite tribes could be considered 'Apiru by the Egyptians must be considered a distinct possibility.

Various Hebrew and Midianite activities and way of life, as known from the Hebrew Bible, can easily fit within the larger Egyptian descriptions of 'Apiru and Shasu (section 3.2.3). Hebrew and Moabite power clearly ebbed and flowed across the valley as well. Therefore, when using an early conquest model that places the accounts in the Biblical narratives of Numbers, Joshua, Judges and in the Late Bronze Age contemporary with the Egyptian records of the 18th and 19th dynasties, there is not a direct conflict of presence. The activities of one group could easily have flowed into and through the north and central sections of the valley while the interest or power of the other was weak or focused elsewhere (see Figure 5.10). An inclusion of an Israelite identity with some of the reported 'Apiru activity opens the possibility that the Egyptian records to make some reference to Israelite activity in an 'early conquest' model in the central section (the city of Sabuma, EA 274) or in the surrounding highlands (EA 207; 254; 286; 287; 289; 290) and at Yamurta in the Lower Galilee (Seti I stele at Beth-shan, 3.2.2.2; Figure 3.11). Otherwise, it is not till Merneptah that a specific Egyptian mention of a group called Israel is known (the Berlin pedestal seriously suggests that this group and earlier mention before Merneptah specifically mentions a group by the name of Israel in the time of Ramesses II and possibly as earlier as Amenhotep the II in the heart of the Amarna Age (section 3.2.2.5.1). If these Egyptian references are included it still does not make the Egyptian and Biblical records incompatible. The outstanding question is: why does the Biblical record not mention conflict with the Egyptians? The only reference to conflict with the Egyptians in the Biblical narratives relating to this early conquest model in the Late Bronze/Iron Age transition are from the early life of David (1 Samuel 30:11-20; II Samuel 23:20-21; section 3.3.7).

As a geographic/economic/political unit, the Jordan Valley was divided into two sections, the north under Canaanite and Egyptian control and the south under Israelite and Moabite control. The central 'waist' was a transitional zone under the influence of the stronger power at any given time.

5.2.3 Archaeology

The archaeological record of the Late Bronze Age also *divides the Jordan Valley into two sections*, the north-central and the south. All three sections of the valley had major urban settlements during the Middle Bronze Age, Pella and Beth-shan in the north, Abu Kharaz, and Deir 'Alla in the central 'waist', and Jericho, Hammam and Iktanu in the south (extensive Middle Bronze Age strata have not been reached at the large tells of Rehob or Sa'idiyeh). As the Jordan Valley entered the transition period of the end of the Middle Bronze Age and the beginning of the Late Bronze Age, the north and central sections continued with similar occupation patterns and architecture. The occupation strata of this transition period for Hammam and Iktanu are not to be found (Iron Age II strata are built on Middle Bronze Age strata in the excavated areas)(sections 4.2.3.2 and 4.2.3.4). The large Middle Bronze Age site of Nimrin with a massive fortification system and monumental buildings appears to have been abandoned around 1500 (section 4.2.3.5). Jericho's third city (stratum IVc – 1650-1550) was smaller than the previous city (city two) with part of the lower southern section of city two (stratum IVb) being razed for a new fortification system (section 4.2.3.1). During this period, it is most likely that the established parallel connection points, inferring trade, were made with Pella in the north (section 4.2.3.1; Figure 4.19). Stratum IVc ends in a major destruction level sometime in the last half of the 16th century. Although scattered evidence of a Late Bronze Age occupation exists (stratum Sultan V and the middle building; section 4.2.3.1), there are serious questions and doubts regarding the size of the settlement of Jericho. The latest suggested date for the destruction of stratum Sultan V is the last quarter of the 15th century (section 4.2.3.1). All the major parallels identified between Jericho and other sites in the valley are from the Middle Bronze/Late Bronze Age transition period and no later. The urban centers in the southern section of the Jordan Valley began the Late Bronze Age either in abandonment or destruction. The cities of the north-central section continued into the Late Bronze Age without major change.

The archaeological record also concludes that the Jordan Valley was divided into two sections. The north-central section showing a continuation of the Middle Bronze Age culture without any severe cultural break (although some sites have multiple

destruction layers) until the 12th/11th centuries BC. The sites of Pella, Beth-shan and Sa'idiyeh show the influx of Egyptian, Aegean or Anatolian groups but the artifacts appear side-by-side and intermixed with local Canaanite artifacts. This points to a co-existence between the two traditions rather than a conflict. At each of these sites, the period ends much as it began with a predominately Canaanite culture. The southern section begins with the destruction or disappearance of the Middle Bronze Age cities followed by an absence of city settlements until a new cultural tradition began to appear towards the end of the 13th century at Jericho (stratum Sultan VI)(section 4.2.3.1; Table 4.5) and Deir 'Alla (section 4.2.2.1; Table 4.3; Steiner & Van der Steen 2008:17).

5.3 THE EXTENT OF THE INTERACTION BETWEEN THE JORDAN VALLEY AND THE EASTERN AND WESTERN HIGHLANDS DURING THE LATE BRONZE AGE

5.3.1 Geography

One of the best descriptive terms for the southern Levant and Canaan is 'the Land Between'. It is the location of 'between' that has given this region such prominence throughout history. This land is between Egypt and the northern empires of Mesopotamia (Mitanni, Hittite, Assyria, Babylon and Persia). The southern Levant is the 'land bridge' between Egypt and Asia. In this small area, the two main international highways (the Coastal Highway and the King's Highway of the Transjordanian plateau) parallel each other in close proximity as they are squeezed together by the Mediterranean Sea and the eastern desert. These two main international highways did not only integrate the southern Levant into the international trade network but they also thrust it onto the stage of superpower politics. But it was more than just an international doorway. The coastal highway traveling north from Egypt branched in three directions in the Jezreel Valley. One direction stayed on the narrow coast and remained boxed in between the sea and the coastal mountains, one cut through the passes and ridges of the broken Galilean mountains towards the Beqaa Valley of the northern Levant and the third branch stayed on the flat valley floor passing through the Harod Valley before reaching the northern section of the Jordan Valley. On the rich plain of the Beth-shan Valley,

several key regional roads broke off. The main international route continued northeast across the northern valley and followed several ridge routes up to the Syrian plateau. The lesser branches crossed the Jordan River due east or southeast and provided several options to connect with the Transjordanian Highway from the north-east (section 2.3.2.2.2, Figure 5.6) and central-east wadis (section 2.3.2.2.3, Figure 5.6) of the escarpment. Settlements arose long before the Late Bronze Age at key positions along these road junctions. Beth-shan, Rehob, Pella, Sa'idiyeh, Abu Kharaz and Deir 'Alla were all strategically located along this network. These sites must have become way points and trading centers for international and regional trade. During the Late Bronze Age when Egypt consistently dominated the region, a *Pax Egyptia* allowed international trade to expand and these cities flourished. Not only did these cities prosper in forwarding and protecting the international trade, but they operated as regional trade hubs allowing foreign imports to be distributed to sites along the smaller routes branching out from their network. The geography of the 'Land Between' consolidated the transportation networks into the narrow area of the southern Levant with the Jordan Valley as one of three critical roads. Once in the Jordan Valley, these roads were directed along limited paths that allowed for key trading hubs to develop. A network of wadis and ridges provided regional and local passage between these key cities and the international road system. The northern Jordan Valley, particularly around the Beth-shan Valley, was a major international hub integrating the region into the international network.

In Chapter 2 (section 2.3.2.2), a minimum of 23 Late Bronze Age routes connecting the Jordan Valley to the western and eastern highlands are identified. There are other topographical route options but these 23 routes were demonstrated to be in use during the Late Bronze Age by a clear path of contemporary sites along their topographical routes.



Figure 5.6: Probable road routes inferred by archaeological sites, topography and later more established routes. (See 2.3.2.2 for route close ups and details. Route 1 is the International Coastal Highway. Route 2 the international Transjordanian route. Route 3 is the main regional 'central ridge route' traversing the length of the western highlands. The physical topography and archaeological sites of the Late Bronze Age reflect a network of routes that connected the north-central and south sections of the valley to the highlands (Illustration: SMM 1979:4-2. Digitally manipulated by J.M. Schaaf 2011).

The Jordan River, although much wider and with a larger flow rate than today, had a number of fords that did not appear to impede traffic flow. Only during the early spring flood season, which, even in the early 20th century, could be quite dramatic and violent, would trade across the Jordan River be uncertain (section 2.3.2.4).

The Jordan Valley is the lowest place on the earth's land surface. The heights of the surrounding escarpments magnify the depths of this 'great rift'. Rather than stopping movement between Egypt and Mesopotamia, the geography funneled international traffic through the valley. Smaller wadis and ridges provided the physical opportunity for local areas of both the eastern and western highlands to connect and integrate with the larger regional and international network.

5.3.2 History

The answer to the second question (To what extent was the Jordan Valley interacting with the eastern and western highlands during the Late Bronze Age?), is that the historical records of both Egypt and the Biblical accounts demonstrate that there

were strong connections between the Jordan Valley and both the eastern and western highlands.

Egyptian sources integrate the northern Jordan Valley along with the eastern highlands, the Bashan and Damascus plateaus, Hazor in the Huleh basin, the Jezreel Valley, the coastal plain and the eastern Lower Galilee. The Amarna letters connect the western highlands (Shechem, Jerusalem and the Shephelah) with the north-central section of the Jordan Valley.

The campaigns of the Pharaohs⁶³ focused on keeping the international highway between the Harod/Beth-shan Valleys and the routes up the eastern escarpment to the Transjordanian highway and Damascus under their control. Occasional forays into the Lower Galilee are recorded to put down rebellious cities that were along key access points to the Harod Valley and the northern section of the Jordan Valley. Only the campaign of Merneptah can possibly be inferred to include military action into the western highlands (section 3.2.2.5).

Papyrus Anastasi I and many of the Amarna letters surrounding the Labay'u and sons' affair (EA 237, 244, 245, 246, 250, 252, 253, 254, 255, 280, 287, and 289) connect the northern valley with Shechem in the central western highlands and even the coastal plain. The western highland connection is pushed even further south with EA 285 showing interaction between Jerusalem and Beth-shan. EA 274 suggests connections between the Shephelah and the central 'waist' of the valley.

Map showing the network of connection points from the many Lab'ayu and Son's affairs connection Northern Jordan Valley to greater area:

⁶³Thutmose III (section 3.2.1.5), Amen-hotep II, Seti I (section 3.2.2.2), Ramesses II (section 3.2.2.3.1, Table 3.7), Merneptah (section 3.2.2.5) and the satirical scribe's itinerary of Papyrus Anastasi I (section 3.2.2.4).

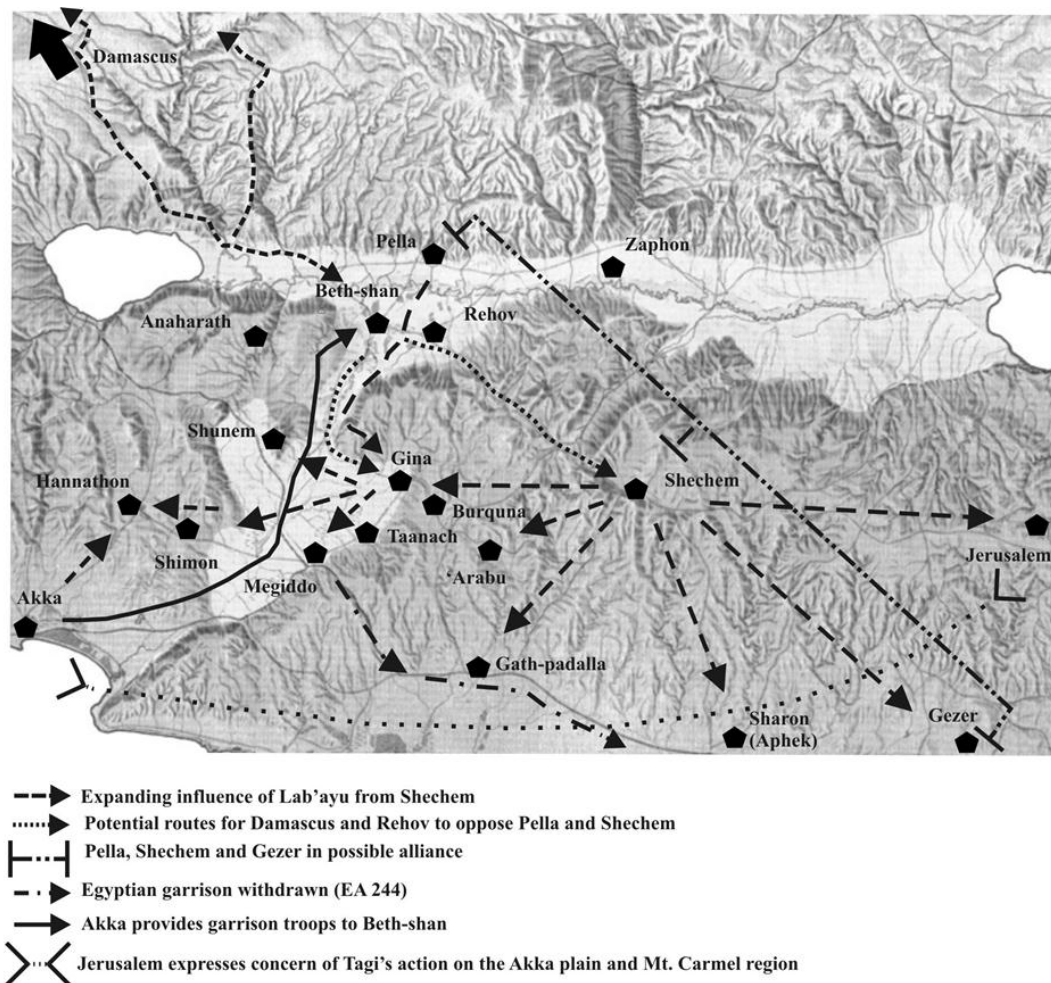


Figure 5.7: The Lab'ayu and son's affair (EA 239-239, 244-246, 249, 250, 252-255, 280, 289)

This map shows the complex regional relations of Lab'ayu of Shechem and his son's political expansion recorded in the Amarna letters. The Jordan Valley is connected with the western highlands, the Lower Galilee and the Coastal Plain as far south as Gezer. The Egyptian garrison at Megiddo was withdrawn leaving a power vacuum that Lab'ayu moved to fill (EA 244). From the Central Jordan Valley (Rehov?) complaints about Milkilu of Pihilu and Lab'ayu from Shechem expanding on Gina and Gath-padalla are sent to Egypt (EA 249-250). EA 250 requests Pharaoh to order Biryawaza of Damascus to get involved against Milkilu and Lab'ayu. EA 289 associates Pihilu and Gezer in a possible alliance as well as with Lab'ayu from EA 250. Pihilu, Rehob and certainly Beth-shan are caught up in the larger regional Lab'ayu affair that includes the Lower Galilee. It is easy to imagine one of these cities in the Jordan Valley having parts of their grain supply destroyed as recorded in EA 224. Akka sent troops to Beth-shan (EA 289). Other Amarna letters not represented on this map would show even wider connections to the highlands. EA 285 shows a connection between Jerusalem and Beth-shan that bypasses the intervening connection point of Shechem in this map (Figure 3-7). EA 256 shows the Pella – Damascus Plateau link (Figure 3-9) (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

The Biblical narratives of Numbers, Joshua, Judges, Ruth and the first part of I Samuel (in an early conquest model) recounts many activities and strong ties between the southern section (centered on Gilgal) and the western-eastern highlands throughout the long running narrative. Only towards the close of Judges (near the Late Bronze Age/Iron Age transition in the early conquest model) do accounts include the Lower Galilee, the Beth-shan Valley, the central 'waist' and all of the eastern highlands.

The accounts of Ruth and the kidnapping of the virgins of Jabesh-gilead for Benjamin as well as the placement of the Levitical cities demonstrate that the Jordan Valley was not a barrier between the two highlands (sections 3.3.6.3; 3.3.6.2; Figure 3.22). The Jordan Valley was easily accessed from the Lower Galilee and the Samarian Hills on the west and the Zerqa/Jabbok Valley on the east as seen in the accounts of Gideon (Judges 6-8) and Jephthah (10:6-12:7). According to the biblical narrative the southern sections routes into the highlands appear to be limited to more local interaction (Joshua 4:20; 5:10; 9:6; 10:6-9, 15, 43; 14:6; Judges 2:1; Ruth; I Samuel 7:16). Although these smaller (local) routes do give access to the Madaba Plateau and the Tranjordanian highway in the east and the strategic crossroads of the Central Benjamin Plateau in the western highlands, the historical record of the Late Bronze Age does not describe any large regional or international traffic utilizing these routes.

Although there are many accounts showing interaction between the valley and highlands, it is hard to quantify the degree of integration between them. The degree of integration between the valley and highlands appears to be stronger in the north than in the south at the beginning of the Late Bronze Age (correlating with the north-central and south section divisions of the valley). The Egyptian accounts as well as the Biblical account of Deborah and Sisera describe the Canaanites of the Jezreel Valley and Northern Jordan Valley areas forming coalitions to fight against the Egyptians and the Israelites. These same forces appeared to have tolerated the arrival of the Israelites in the isolated, poorer and less populated 'back water' of the southern section. The bordering western highlands also appear to have a higher degree of tolerance for the newcomers, as they chose to negotiate with the Israelites rather than fight (as opposed to the north which had allied against Israelite forces under Deborah/Barak as well as against Egypt in separate engagements)[sections 3.2.1.4; 3.2.2.2; 3.3.5.3]].

In later Biblical accounts of Gideon, Jephthah, the Benjaminite war and Ruth, the Jordan Valley is used as a thoroughfare between the highlands (Judges 6-8; 10:6-12:7; 19; Ruth; Figures 3.27-29) and even a staging area for raids into the highlands (Joshua 9:6; 10:6-9, 15, 43; 14:6; Judges 3:12-30; Figure 3.23 & 3.26). But there

seems to have been an uneasy border at the escarpment walls where interaction and migration could occur in times of stability but could easily be shut down and protected in periods of danger.

The projection of military power appears to have flowed stronger into the valley than up into the highlands. When either an eastern or western highland force descended into the valley, it usually stopped on the valley floor and was limited to forays into the opposing highland (Judges 3:12-30; 6-8; 10:6-12:7). The southern half of the valley was used by the Hebrews, Moabites and Midianites as bases of operations for raids into the highlands. As Joshua based his western highland conquest from the valley floor at Gilgal, the Moabites also attempted to connect their forces in dominating the western highlands with their historic territory in the east by establishing an administrative center in the Jordan Valley at Jericho (Judges 3:13). The Midianites also used bases in the Jordan Valley in their western plundering (Judges 7:22). The southern half of the Jordan Valley was well integrated with both the eastern and western highlands as people constantly moved in and through the valley from the passes on each side. Connection of the southern section of the valley to the highlands appears to have run long and deep with the Gilgal remaining a cultural religious center for the Israelite tribes in the western highlands through the time of the conquest to the last judge, Samuel (section 3.3.8; Figure 3.30). The Plains of Moab also remained in the memory of Ammon as being a part of their territory over 300 years before the time of Jephthah as revealed in the Ammonite negotiation claims with Jephthah (Judges 11:26; section 3.3.5.6).

The Jordan Valley had many points of connection and interaction with the western and eastern highlands. However, the integration was limited by the ability to restrict and confine movements along the barrier of the steep escarpment walls with their defined wadi and ridge routes.

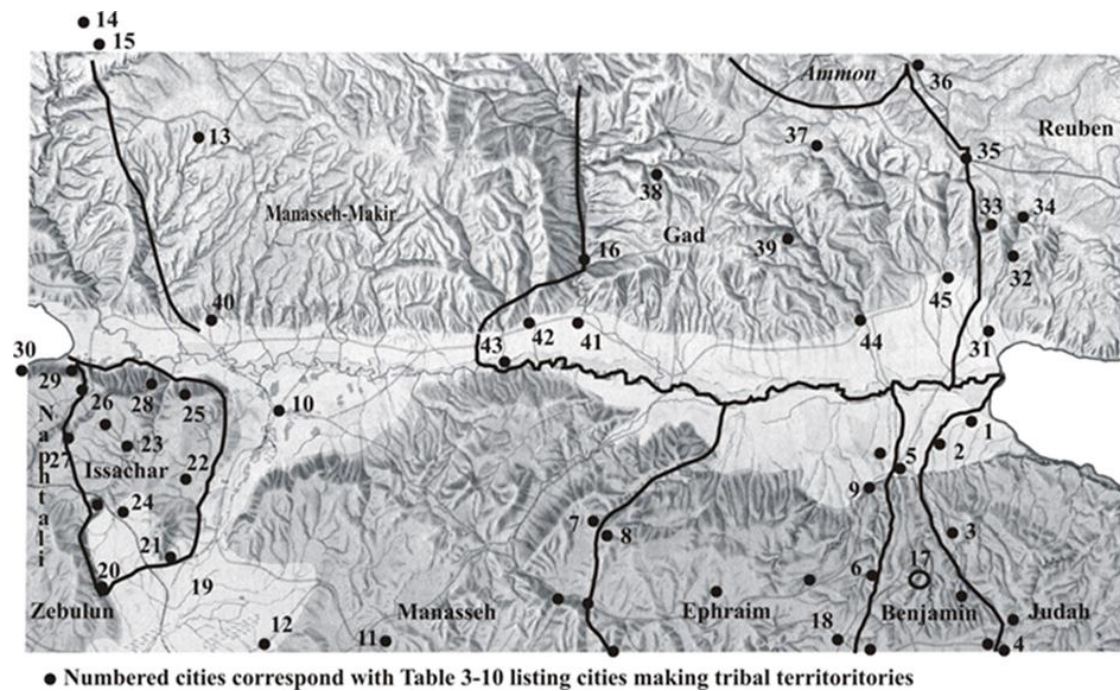


Figure 5.8: The Israelite tribal allotments that include sections of the Jordan Valley
 Eight of the Israelite tribes were allotted territory in or adjacent to the Jordan Valley. The allotments are oriented on an east-west axis connecting territory in the highlands to the Jordan Valley. The tribe of Manasseh did not occupy the Northern Jordan Valley territory (Joshua 11; Judges 3). It is not clear how much of the Central Jordan Valley Gad actually occupied or when they exercised influence over the region. The numbers on the map correspond with tribal boundary markers listed in Table 3.10 (Illustration: SMM 1979: 4-2. Digitally manipulated by J.M. Schaaf 2011).

5.3.3 Archaeology

To find the answer to the second question (To what extent was the Jordan Valley interacting with the eastern and western highlands during the Late Bronze Age?), Chapter 4 examined a number of preliminary and excavation reports looking for parallels between sites that inferred trade connections or cultural influences. The majority of artifacts compared were ceramics. Of the key sites whose published materials were examined, maps were drawn connecting the sites with those sites where parallel artifacts were reported.

Figure 5.9 (below) is a composite map of all the parallel connection points between the examined sites of Chapter 4 spanning the full breath of the Late Bronze Age. Removing the connecting lines from Jericho would be more reflective of the whole Late Bronze Age, as practically all the Jericho connections come from Garstang's Tomb 13 which falls in the Middle Bronze/Late Bronze Age transition.

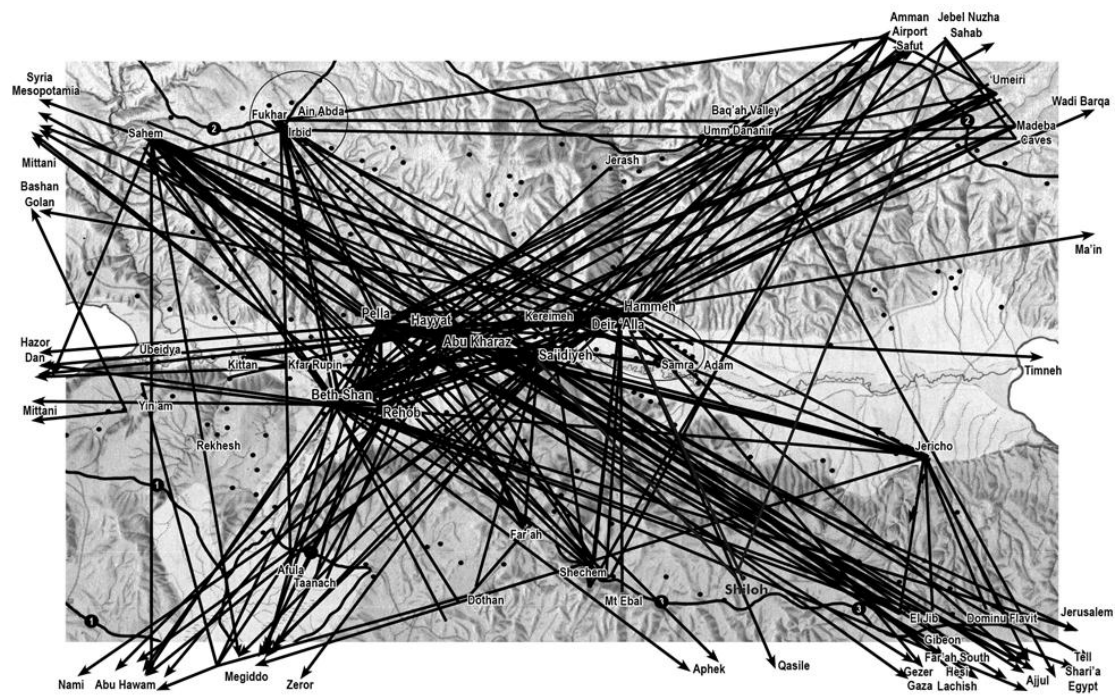


Figure 5.9: A composite showing all the parallel connection points mapped out in Chapter 4. The Jordan Valley has multiple connection points to the eastern and western highlands. The lack of connections in and through the southern section reflects the disparity and division of the south from the north-central section (Illustration: SMM 1979:4-2 Digitally manipulated by J.M. Schaaf 2011).

Although slightly misleading due to the fact that connection points through the valley or from the valley to distant sites would most likely go through middle men and trade centers rather than a direct point to point transfer (see Figure 4.4 of the Mycenaean ware trade network for model of a more realistic network would look like), the density of connection points reflect a high level of interaction between the valley and the highlands

The Jordan Valley had a high degree of interaction with the eastern and western highlands. This network also connected the Jordan Valley to Egypt via the coastal plain, the Araba (south along the Transjordanian Highway), Hazor and points north via the Galilee and Mesopotamia via the Bashan and Syrian Plateau. This network funneled through the Jordan Valley around Beth-shan and Deir 'Alla. After the Middle Bronze/Late Bronze Age transition, the archaeological evidence for the southern section of the valley is absent. The historical record also connects the southern section to the international network at the Middle Bronze/Late Bronze Age transition and then regresses to only local connections with the Madaba Plateau and the Central Benjamin Plateau to the Bethlehem area.

5.4 A HISTORICAL GEOGRAPHIC METHOD

The thesis has modeled the strengths of a historical geographic hermeneutic. It has explored the plausibility of an early conquest model of the Hebrew Bible. It has provided a clear north-central and southern division of the Jordan Valley before the establishment of the local kingdoms and the larger empires appear to divide the valley along an east-west axis centered on the Jordan River (with the exception of the Ottomans, section 5.4.3; Smith 1974:344).

The historical geographical method strengthens the summary findings from each discipline's research in asking the same two questions. In a few cases, the clearest being Jerusalem resting on the peripheral of this study, two disciplines (history and geography) help fill in the gap of sparse evidence from the third (archaeology). Although no archaeological city strata has been found in Jerusalem, the limited ceramic finds with parallels connecting the area to the Jordan Valley can be supplemented with the historical and geographical evidence. The historical record of a regional leader, struggling for power with his Egyptian garrison, complaining to the Egyptian commissioners in Beth-shan and Gezer, suggests a well-established urban city functioning as a military hub for the region. The probability of the city functioning in this regional hub is supported by physical and human geography showing established routes of communication and commerce between the mentioned sites. In the Jordan Valley, the historical geographical method has shown that an early conquest model is not in direct conflict with the more definitive chronological records of the Egyptians.

This research attempts to demonstrate the role of both physical and human geography in contributing to the understanding of the historical and archaeological record. The physical geography is much like a chess board with the individual squares governing the movement of people and events. The historical record would be the rules describing the players, their reasons and order of events. The archaeological record would be the retracing and establishing the actual movements of the teams and individual pieces. A working knowledge of all three areas is required to understand and 'play the game.'

History and archaeology are two complementary fields that are often pitted against each other, especially regarding the use and study of the Biblical record. Adding geography to the discipline mix of both historical archaeological studies brings another set of methods and tools to the mix and brings a balance to the two.

One goal of this thesis was that the integration of the three disciplines of history, archaeology and geography, especially highlighting the role of geography, will raise further interest and activity towards further development and use of a historical/cultural hermeneutic. A historical geographic hermeneutic would help bring clarity to understanding the past by adding further resources that the more popular practices of literary hermeneutics and archaeology bring to an understanding of our past. It is the hope of this author to have highlighted the role and raised an appreciation for the value of both physical and geographical studies in the disciplines of history and archaeology.

5.5 THE REGIONAL ROLE OF THE JORDAN VALLEY BEFORE THE RISE OF POLITICAL DIVISIONS

This historical geographical method has also established a physical and economic division of the Jordan Valley on a north-south axis with the dividing line just south of the Zerqa (Jabbok) before the rise of local kingdoms and the multiple political divisions of the valley that followed on an east-west orientation. The Jordan Valley is two separate units. The north-central section was a rich agricultural unit able to support a number of urban centers, closely networked to the outside world through the passage of an international transportation network. The southern section was a poor isolated backwater, interacting with the highlands through a local transport network but dependent on the north-central section for international access. Although modern agricultural methods have enabled the southern section to increase its production and population, for most of history, it probably remained an isolated area, with small communities. These small settlements were located on the alluvial fans close to the escarpment with immediate access to the highlands while the rest of the plain was left untamed except for the roadways and fords necessary for passage through the area. The north-central section followed the ebb and flow of

the larger region as times of prosperity brought increased traffic along the international routes and during times of depression retreated to a life better than subsistence as the rich abundant agricultural land provided opportunity for production in excess of subsistence living. Militarily, the Jordan Valley was vulnerable to the powers in the highlands and those that would travel on the international routes. Without a strong central power, local and regional forces descended into the valley to raid and occupy. In reverse, the fragmented topography of the highlands allowed for these local powers to more easily fend off movement from the valley into the highlands. Only during the flood season of the Jordan River does the Jordan Valley present a clear barrier between east and west.

A quick review of later periods fails to find the Jordan Valley as an independent geographic/economic unit – or political unit. In the Late Bronze Age, the individual city-states competed amongst themselves, dividing the valley into three or four divisions (section 2.3.1.1). Egypt provided some governance and military threat from Beth-shan that gave a superficial regional unity, but there is no evidence that the Jordan Valley was an individual unit. Although a number of the Amarna letters tie the Egyptian concerns of the Jordan Valley into their greater administrative network in the Bashan, Jezreel Valley and coastal plains (EA 232, 234-35, 256; Figure 3.6-9; section 3.2.1.9), many others, primarily based around the Labay'u and sons' affair (section 3.2.1.9.6), demonstrate the political fragmentation of the valley and highlands. The Hebrew tribes divided the Jordan Valley into east-west segments attaching parts of the valley to tribal territories anchored in the highlands rather than treating the valley floor as a single unity. In the Greek period, the Jordan Valley was divided into two main parts:

- Perea (the eastern side of the Jordan Valley running from Pella to Machaerus and up to the eastern plateau with the eastern highland city of Gadara as its local administrative city (Josephus Wars III:3) was grouped by Herod and Augustus, with the Galilee under Antipas;
- The western side of the valley remained in the province of Samaria.

Under later Roman redistricting, Perea fell under the governor of Damascus with the western divisions of Judea and Samaria falling under the Roman government seated on the coast at Caesarea (Tabor 1999).

Even in the modern era, the Jordan Valley has not been a single political unit. Under the Ottomans, the Wadi Jabbok was the political division between two Mutasserafliks (provinces). The eastern highlands and connecting parts of the Jordan Valley around the Yarmuk fell under the 'Mutasseraflik of the Hauran' with Damascus as its main seat of power but ruled by a local garrison in Irbid on the eastern plateau. South of the Jabbok and most of the valley floor was in the 'Mutasseraflik of Belka' which was administered from Nablus in the western highlands and with a local garrison in the eastern highlands at the town of Salt (Smith 1974:344).

Further studies of the region (historical and modern) cannot isolate the Jordan Valley as an independent economic and political entity. In order to gain a fuller understanding of the Jordan Valley future studies must integrate the historical and archaeological records of the eastern plateau alongside those of the Jordan Valley.

5.6 FURTHER AREAS OF RESEARCH

This research has raised further questions that the author would like to investigate. The main ones are:

- *Plausibility of an early conquest model*

In placing the Biblical narratives of Numbers, Joshua, Judges and Ruth into the Late Bronze Age setting of the Jordan Valley, there is no direct conflict with the Egyptian historical records. The allowances that exist between the Egyptian and Hebrew Bible's history in the Jordan Valley call for further research into the plausibility of an 'early conquest' model. This further research would need to combine the conclusions of this research with a detailed study of the other models of Israel's emergence and a more critical approach to the redactionary theories of the Hebrew Bible that were beyond the scope of this study.

The following chart is a combination of Figures 3.18 and 3.20. It is an attempt to visually synthesize the Egyptian and Biblical accounts of the Jordan Valley during the Late Bronze Age. The background frame is the southern Levant moving west to east (left to right) representing the coastal plain, the western highlands, the Jordan Valley and the eastern highlands. The reigns of the Pharaohs are used to provide a time line starting at the bottom and moving forward in time. Light grey bars moving from the coastal plain eastward represent an Egyptian presence or the recording of activity that penetrated through the geographic regions that their bars enter as they moved from the coastal plain eastward. The darker grey bars represent activity affecting the Jordan Valley that comes from the Biblical sources. The choice of placing the Biblical account bars is based on the early conquest model covered in section 3.3.2 using the Biblical narrative as *prima facie* and the narrative's internal chronology. The placement of the Biblical bars is not meant to represent hard dates but the bars are merely examples taken from one of several early conquest chronologies in order to see how the two sources may match up (see 3.3.2). The dark bars of the Biblical events may slide up or down the Egyptian chronologies according to one's hermeneutical application towards the Biblical dating. These may originate from either the western or eastern highlands, penetrating into or through the Jordan Valley. Labels next to or in the bar signify the groups mentioned in the account (i.e. 'Apiru or Moabites) or the source that reported the activity (i.e. Papyrus Anastasi I). The 11 pointed stars represent conflict in the particular geographic region reported in the source.

Egyptian and Biblical (late 15th century conquest model) textual references to people and conflicts surrounding the Central Jordan Valley.

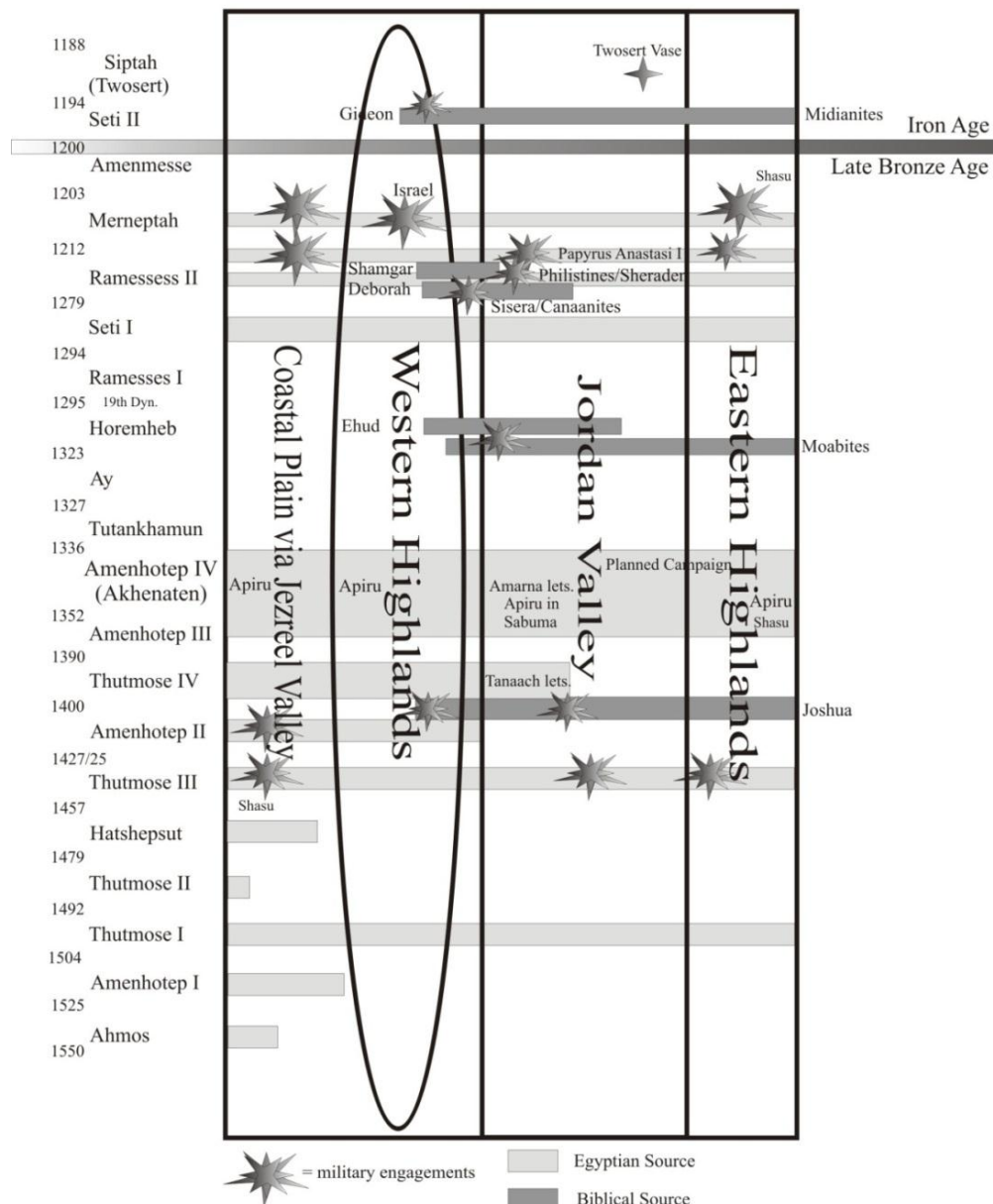


Figure 5.10: A chronological synthesis of Egyptian and Biblical records over the geography of the southern Levant. The illustration (a synthesis of Figures 3.18 and 3.20) (Schaaf 2010) shows that both the Egyptian and Biblical records have gaps where they do not record activity in and around the Jordan Valley. These gaps allow the two historical records to fit together as they do not record activity in and around the Jordan Valley. The period around the reign of Seti I and Ramesses II is crowded. Unfortunately, the military engagement marker for Seti I in the Lower Galilee with the 'Apiru at Yarmuta (section 3.2.2.2.1) was left off this chart. Visualizing this extra marker makes the surrounding era even more crowded. However, if the Biblical bars can slide up or down 25 years, to include the various early conquest models, there is ample room for the two records to coexist. The Berlin pedestal with its probable mention of Ish-rael (Israel) is not marked either. This reference to Israel (similar to the Egyptian mention of Israel during the reign of Merneptah) could be placed somewhere (probably in the western highlands) between the reigns of Thutmose III and Ramesses II, preferably in the reign of Amenhotep III at the beginning of the Amarna period.

Although the historical records do have a direct conflict with each other, the question remains as to why the two sources do not mention each other. Section 5.2.2.1 mentions several possibilities regarding the Egyptian sources mentioning or

not mentioning the Israelites. A correct but perhaps overly simplified answer regarding why the Hebrew Bible does not mention the Egyptians in the covered accounts is that it is not part of the Hebrew Bible's *Heilsgeschicht* (see 1.5.2.1.2; footnote 3). Although this answer is not as satisfying as this author would like to this general question as well as more specific ones. Such as, how could Egypt allow a force as strong as that described in the Deborah/Sisera account to gather in the Jezreel Valley without taking it as a threat to international trade and demanding an Egyptian response? The exploration of these questions must await discussion outside this thesis. The first mention of Egyptians in the southern Levant by the Hebrew Bible is in the early life of David during Samuel's tenure of being the last judge. These two references were discussed section 3.3.7. Both show that the Egyptian power in the southern Levant was waning. In II Samuel 23:20-21, Benaiah son of Jehoidad kills a heavily armed Egyptian. Killing the Egyptian is recorded as a valiant deed signifying that there was a high level of awe and respect for the Egyptians, but not enough fear to prevent Benaiah from engaging the Egyptian in personal combat. While David was living on the coastal plain battling the Amalekites, an Egyptian slave became separated from his Amalekite master (II Samuel 30:11-20). By the time of this account, Egyptian power on the coastal plain must have been very low indeed.

The Egyptian records clearly mention Israel at the end of the Late Bronze Age in the reign of Merneptah. It now appears with the Berlin pedestal that there is a second earlier mention of Israel (3.2.2.5.1). The argument that the 'Apiru are Hebrews is a closed negative argument. However, the possibility that the Hebrews could be included in the references to the 'Apiru and Shasu (section 3.2.3) must remain open.

Regarding the question of how the Egyptians could allow the gathering of both an Israelite and a Canaanite force such as those reported in Judges 4-5 in the Deborah/Sisera conflict (section 3.3.5.3), it appears that the Egyptians had a high degree of tolerance for local forces as long as they did not interfere with the international trade and communication network (Tubb 1998:90-91; Warburton 2001:233-237). Egypt did not attack Hazor, even after leading a coalition against it in the Jezreel during the campaign of Thutmose III. As long as Hazor did not interfere with the trade routes, Egypt was content to bypass the city on the northern branch

of the coastal highway through the Galilee or on the northeast international route through the Northern Jordan Valley. This example could help explain the appearance of the Egyptian governor's residence, temple and garrison at Tell Sa'idiyeh at the close of the Late Bronze Age. As Pella became more and more hostile to Egypt, harboring Egyptian fugitives, interfering with trade caravans on the Damaskan plateau (EA 255 and EA 256; section 3.2.1.9.4 and 3.2.1.9.8), even capturing Bethshan, there is no record or evidence of an Egyptian attack on Pella. As Pella exerted its influence, it appears Egypt may have established a base at Tell Sa'idiyeh to guard the nearby river ford and started utilizing the more central routes up the eastern escarpment rather than those that passed by Pella (Tubb 1998:90-91).

In examining the historical record of the conquest, the lack of archaeological evidence in the southern section may add further weight towards an early conquest model than the discovery of large urban centers. The campsites of transient people are usually not marked by structures that survive through time and are difficult to identify. So the absence of large urban strata on the Plains of Moab would actually spark conflict between the urban population and an arriving group of immigrants trying to set up camp in the area.

The Israelites were forbidden to rebuild and settle in Jericho (Joshua 6:26). However, Eglon, the king of Moab set up a palace/administrative center at Jericho many years after its 'destruction' (Judges 3:19). His reign from Jericho lasted 18 years (Judges 3:14). In the reign of Ahab, in the 9th century, several centuries after the destruction, judgment came upon the Israelites and the prophet Elijah declared that it was partly due to Hiel's re-occupying the site of Jericho by building his house there (I Kings 16:34). A *prima facie* reading of these Biblical narratives in an early conquest model would lead one to expect little to no evidence of a Late Bronze Age occupation of Jericho.

In general, the archaeological record of the Jordan Valley does not deny an early conquest model that is often portrayed. The lack of a clear occupation/destruction layer at Jericho is often touted as proof that an early conquest model is implausible. However, section 4.2.3.1 demonstrates that the argument that no Late Bronze Age

occupation existed, cannot be held dogmatically. The dating of the destruction of the Middle Bronze Age walls and the large burn layer contains enough variance to be considered as fitting into an early conquest model. This author would like to see a focused study on the use of the Middle Bronze Age fortification systems into the Late Bronze Age. As Abu Kharaz's Late Bronze Age walls utilized components of the Early Bronze Age walls (Fischer 1999; 2006) and parts of Tell el-Hammam's Iron Age walls used elements of the Middle Bronze Age fortifications (Collins 2007:14), is it reasonable to consider that Jericho's Middle Bronze Age walls could have been in use at the beginning of the Late Bronze Age? What would further investigation of Jericho's Middle Bronze Age walls of the third city (stratum IVc) or the fourth city (stratum Sultan V) reveal as having extended use (to some degree) into the Late Bronze Age (as some models such as Wood 2008 propose)?

The division of the Jordan Valley into the north-central and southern section resulted in the situation where the north-central populations resisted Israelite incursion into their territory but stayed in a defensive position, leaving the south to its own fate thus allowing the Israelites to organize themselves and base themselves in the southern section unmolested while they took control of the eastern and western highlands. The Egyptian records show a similar pattern. Egypt was interested in the region as a whole but its presence and activity was primarily only in the north and central sections. There is no record of Egyptian Late Bronze Age activity in the valley south of the central section, although once in the eastern highlands, Egyptian activity runs much further south along the King's Highway.

Israel in the southern section could tolerate being isolated from the northern section because secondary routes through the highlands provided access to international trade. Access to the King's Highway was relatively easy via routes along the Slopes of Pisgah. Access to the coastal highway was more difficult but possible through secondary routes ascending west from Jericho and connecting with routes descending through the Shephelah from the Central Benjamin Plateau and Jerusalem.

- *The role of the 'East' in the Bible*

According to the results of this study, the primary division of the Jordan Valley was along a north-south line around the Wadi Zerqa. The cultural division expressed throughout the larger Biblical record is east-west across the Jordan River. The political division from the allotment of the Israelite tribes (Numbers 34:2-12; 35:10, 14) and subsequent periods used the river as a boundary marker. A number of eastern characters have central roles in the Old and New Testaments; Moses' father-in-law Jethro (a Midian priest), Job, Job's advisors Lemuel and Agur (Proverbs 30 & 31), Esau, the wise man of the nativity story come from the east and Paul immediately goes east to Arabia after his conversion. The lands of Edom, Ar and Moab are each declared as gifts from Yahweh to their people and the Israelites are warned against fighting them (Deuteronomy 2). Both in the Song of Deborah in Judges and in the New Testament, salvation and the Messiah Himself come from the east. What is the significance of this orientation that appears to go against the local physical and human geographic divisions, the initial history of the Jordan Valley and the archaeological record?

- *The re-use of Middle Bronze Age fortification systems in the Late Bronze Age*

Although the destruction of the main walls of Jericho and the general destruction layer that surrounds city IV have a relatively wide variance in their dating, the actual walls and towers often cited as relating to the Joshua account appear to be clearly established up to the Middle Bronze Age. Other sites in the valley such as Abu Kharaz appear to have used, at least in part, Middle Bronze Age fortifications during the Late Bronze Age. Preliminary reports of Tell el-Hammam have the Iron Age walls utilizing elements of the Middle Bronze Age fortification systems. Is there a pattern of evidence that large Middle Bronze Age fortifications consistently remained in use (beyond foundation level) in later periods? If so, what would the implications be for the Jericho destruction debate?

- *Eastern escarpment routes of the Late Bronze Age and Iron Age*

The inferences made for the various eastern escarpment routes were based primarily on topography and archaeological sites to trace potential routes. General knowledge of later historical routes was used. However, it would be a worthy study to follow the Dorsey (1991; section 2.3.2) model more scientifically by examining the historical accounts of later periods for transport routes and including the Roman and Ottoman maps of local routes to establish the routes further.

- *The development of interactive teaching modules* using Google Earth as a basis for overlaying historical maps, embedding photos and text as well as ‘fly through’ particular routes and campaigns to enhance the understanding of the movement of history through both time and space.
- The Egyptian frontier on the Transjordanian *Plateau during the Late Bronze Age*

The campaigns of Seti I, Ramesses II and Shishak all appear to have followed north-south routes along the Transjordanian highway. Coupled with the Ba’lua stele (Ward & Martin 1964:5-11), a growing number of Late Bronze Age sites on the Amman and Irbid plateaus are revealing Egyptian artifacts. Was the source of these artifacts through middle-men traders or direct Egyptian presence? The routes of the slopes of Pisgah/Slope of Akrim should receive special focus in investigating whether these routes were used as part of a greater network than just the route between Moab and Judah and the local southern section of the Jordan Valley as this thesis suggests.

- *Climate change and population impact*

The confined space of the Jordan Valley with its limited precipitation and dependence on drainage from the highlands provides a unique environment to study ancient climate change and its effects on the population. Climate change was lightly covered in section 2.2.2.5 but the nature and scope of this paper does not allow for a detailed study of the published material.

The Zerqa triangle is a marginal occupation zone just inside the rainfall zone of 100-150 mm per year that allows for dry farming. The large number of archaeological

sites since early chalcolithic periods makes it an ideal location for climate studies and the effects on human settlement. Due to the area's location in the rain shadow, precipitation may not vary extensively, and the settlements were probably more dependent on the large drainage basin of the Zerqa valley, which would allow for general precipitation variants over a large area but the effects be measured in small focused area. The biggest environmental impact on the Jordan Valley since the Late Bronze Age and the 19th century has been a) an increase in population during subsequent periods; b) an increase of irrigation both in the valley and in the highland watersheds (decreasing drainage to the valley); c) the growth of the road network system from the Roman period onward resulting in increased population and economic growth; d) the deforestation of the eastern highlands by the Ottomans in support of their railroads.

Until the end of the 19th century, before the era of modern states and advanced irrigation techniques, the environment had changed very little. The taming of the Zor and the decrease in the numbers of wild animals has been a slow continual process. The greatest impact over the centuries has been political. When an international or regional power was able to ensure security from harvest raiders and provide safe transport of goods, the agriculture and population of the Jordan Valley increased. When isolated by individual city-states or being caught between competing powers from the east or west, the Jordan Valley suffered. The population of the Jordan Valley experienced both phenomena. Under imperial Egypt, the Jordan Valley experienced general peace and prosperity due to the resulting 'peace' of Egyptian control and integration into the international trade routes. Whenever imperial Egypt was weak and not focusing on southern Canaan, the individual Canaanite cities went to war with each other, interrupting trade and development. As Egypt grew weaker, competing small kingdoms in the eastern-western highlands arose with the agricultural population of the valley suffering raids and exploitation. When one power dominated or there was a stable peace between the highlands, the Jordan Valley benefitted due to its connection with both east and west.

- Can the appearance of anthropomorphic sarcophagi/coffins on the Amman Plateau in the Iron Age be traced to those from the Late Bronze Age Iron Age transition in Beth-shan, Sa'idiyeh and Pella – suggesting an eastern migration Egyptian or Anatolian influence?
- Can the plague mentioned in the biblical narrative of Numbers 25 (see 3.3.3) be associated or linked with a larger regional plague that rampaged across the region for twenty plus years during the mid to late 14th century as described in both the Amarna Letters and the Hittite plague prayers of Mursilis (Aharoni 1979:210; ANET 1955:394-95)? Although a bit tenuous, it would be another thread of evidence weaving the Jordan Valley into the wider fabric of the greater region.

Several excavations in the Jordan Valley are currently underway that may shed new information relating to the Jordan Valley in the Late Bronze Age. The excavations at Tell Rehob and Hammam are currently focusing on Iron Age strata. Ongoing excavations at Pella and Jericho add data relevant to this study in every preliminary report and the Zerqa Triangle project and a potential excavation at Tell Damiyeh/Adam is greatly anticipated. The story of the Jordan Valley in the Late Bronze Age continues to unfold.

EDITORIAL APPARATUS

The following symbols are used in the translations and transcriptions:

[]	restored text
[...]	missing text
...	obscure or greatly damaged text
< >	omission by scribe
« »	sign(s) repeated by error
TM □	sign(s) partially illegible
()	word(s) supplied by editor to clarify text

ABBREVIATIONS

ABD	<i>The Anchor Bible Dictionary</i>
AEL	<i>Ancient Egyptian Literature</i>
ANET	<i>Ancient Near Eastern texts relating to the Old Testament</i>
NEAEHL	<i>The new encyclopedia of archaeological excavations in the Holy Land</i>

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